THE LITERARY DIGEST

PUBLIC OPINION (New York) combined with THE LITERARY DIGEST

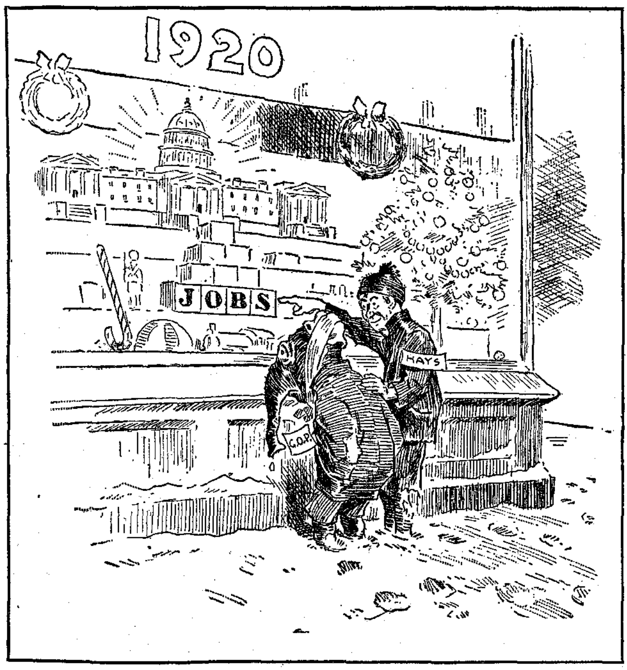
Published by Funk & Wagnalls Company (Adam W. Wagnalls, Pres.; Wilfred J. Funk, Vice-Pres.; Robert J. Cuddihy, Treas.; William Neisel, Sec'y), 354-360 Fourth Ave., New York

Vol. LXIII, No. 13 New York, December 27, 1919 Whole Number 1549

TOPICS - OF - THE - DAY

WHO'S WHO IN THE PRESIDENTIAL RACE

SO MANY GOOD AMERICANS have never before aspired to the Presidency at this early stage of the campaign, we are assured by competent authorities on things political. The New York *World* (Dem.) calls attention to the "record-breaking list of entries in the Presidential handicap." It is a veritable bumper crop of booms and boomlets, the Baltimore *Sun* (Ind.) remarks: "Democrats and Republicans have been popping up all over the country, stretching themselves to their greatest height and craning their necks in the hope that the Presidential lightning may hit them." The truth is, asserts the Richmond *News-Leader* (Dem.), in an editorial headed "Abundant Timber—Mostly Green," "that Americans no more know to-day who the candidates of the great parties are to be next summer than they knew the day after the election of 1916." It sees politics "in such a muddle that the leaders are uncertain as to the qualities that will make candidates available." One experienced newspaper correspondent "swung around the circle" through twenty States without finding anywhere a "wide-spread, spontaneous public sentiment in favor of any one man." Yet the existence of Presidential preference primaries in twenty-two States, beginning early in March, makes it essential, as the Springfield *Republican* (Ind.) points out, "that the private citizen form his own opinion and determine his own preference earlier than in the past." The newspapers, generally cautious about committing themselves in favor of any given candidacy while politics is in such an uncertain stage, are, however, commenting more freely and dispassionately upon the various Presidential aspirants than they are likely to do later, when the lines are drawn more tightly. And this very fact enables us to present to our readers well in advance of the primaries the chief merits and demerits of the principal contestants for the Presidential nominations as seen by the men themselves, by their friends, or by the newspapers most familiar with their records.



"O-O-O-O, LOOK!"

—De Mar in the Philadelphia *Record*.

Among the leading contenders for the Republican Presidential nomination are three or four Senators, as many Republican Governors, and one Major-General in the United States Army. Maj.-Gen. Leonard Wood's Presidential boom has been long agrowing. Last spring Senator Moses openly proclaimed him New Hampshire's favorite son. In June the Los Angeles *Express* (Ind.) polled several hundred Republican leaders and editors throughout the country. There were 131 first-choice votes for Wood and not more than forty for any other candidate. In November it took a second poll of the same list of Republicans: Wood received 147 votes, and Governor Lowden was second with fifty-three, and the others less than forty each. In a poll taken among the Republican members of Congress by the Cincinnati *Enquirer* (Ind.), General Wood, in the Chicago *Tribune's* (Rep.) words, led "so decisively that the others were merely also-rans." When the Republican State convention met in South Dakota to select names to submit to the voters in the March primaries, General Wood was indorsed by a substantial plurality over Governor Lowden, his chief competitor. As other candidates' names may be placed on the ballot by petition, this act is not the final voice of South Dakota. But to many editors it seems most significant. A Democratic daily like *The Arkansas Democrat* (Little Rock) sees General Wood "the favorite against the field." The Detroit *Free Press*, an independent daily with Republican leanings, is convinced that the demand for Wood "is a genuine demand from the people." To the Wheeling *Intelligencer* (Rep.) it seems a remarkable fact that "of all the men engaged in the war on the part of the United States, either wearing the uniform or in civil service, Leonard Wood has captured the imagination of the American people, and more particularly of the American soldier, to a greater degree than any other man." His friends attribute his political strength to his personality, to his record as an administrator and as an organizer in the Army, to his close friendship with Roosevelt, and his consequent inheritance of part of the Roosevelt traditions, to resentment against the failure of the Wilson Administration to use him in France, to his handling of difficult situations at Omaha and Gary, to his popularity among the men he trained at Camp Funston, and to his publicly expressed views on preparedness and Americanism.

But a Republican paper like *The Ohio State Journal*, of Columbus, is inclined to dismiss Wood as "a rather attractive figure with a number of potentially valuable grievances." The Detroit *News* (Ind.) sees his boom to be based chiefly "on a grouch." It is clear to the Peoria *Transcript* (Dem.) that "the Wood candidacy is based on peeve, not merit." The New York *Journal of Commerce* is certain that the General's chances for the nomination will fade by June; "he has no great record in war or peace, and statesmanship for progress is what is to be hoped for." It seems strange to dailies like the Springfield *Republican* (Ind.), Knoxville *Sentinel* (Ind. Dem.), and Louisville *Post* (Ind.) that the Republicans should consider as a "war-candidate" a man who played so small a part in the great conflict. But others like the Anaconda *Standard* (Dem.) and Fargo *Courier News* (Non-Partizan League) think that the part he did play is his weakness, as they insist that the country does not want a military man in the White House.

Gov. Frank O. Lowden, of Illinois, who has run second to General Wood in most of the polls that have been taken, as well as in the South Dakota convention, is generally described as a "business man's candidate." The Governor has the support of his own important State where leaders of both Progressive and Conservative wings of the party are nurturing his boom. He is pictured as a self-made man, and is now a millionaire. Representative Smith, of Illinois, has issued a formal statement putting forward the Governor as a man capable of giving the country a sound and efficient business administration. The powerful Hamilton Club of Chicago has made a similar indorsement. The Rock Island *Union* (Rep.) declares "the Governor looks like a winner." From across the Mississippi the Des Moines *Capital* (Rep.) says that Lowden "has been a great war Governor." On the Pacific coast such a representative of business interests as *The Coast Banker* (San Francisco) comes out for Lowden for President. On the other hand, Mayor Thompson, whose political power in Chicago has been shown in two elections, has declared that he and many other Illinois Republicans "wanted to be shown" before indorsing Lowden. And the Pittsburg *Leader* (Rep.), owned by one of the strongest supporters of Roosevelt in 1912, comes out against Lowden as a man "who is associated with the defrauders of Theodore Roosevelt," and flatly asserts that "the Republican party can never be united with a Presidential candidate who was a foe of Theodore Roosevelt's."

This accusation at least can never be made against another Western Governor, who has been prominently mentioned for the Presidency, Henry J. Allen, of Kansas. The New York *Commercial* is convinced by Governor Allen's action in getting coal mined by volunteers during the strike that he is a big man, and "the people are always ready to rally to the support of a man who shows true character." William Allen White and Henry Allen are two old friends who were the leaders of the Progressive cause in Kansas in 1912. In a long leading editorial in the Emporia *Gazette*, Mr. White ventures the opinion that if the Wood boom fades, as he thinks likely, the Kansas Governor will be the beneficiary. Both men are held up as the Western embodiment of the Roosevelt spirit, Wood standing for it "in the establishment of law and order," and Allen "in its demand for social and industrial justice."

Calvin Coolidge became a Presidential possibility in the eyes of newspaper editors when he was reelected Governor of Massachusetts last month by a sweeping majority after a stirring campaign for "law and order." He will be Massachusetts' favorite son in the next convention, and will probably be nominated by Senator Lodge. South Dakota has indorsed him for the Vice-Presidency, and several aspirants for the Presidency wish him for running mate. Since the election newspaper interviews and stories have made the public at large much better acquainted with this naturally quiet and retiring man. In a New York *World* article Mr. Louis Seibold calls attention to the fact that he can drive the two wings of his party in Massachusetts "in double harness," and that other New England States are likely to be arrayed behind him. A Washington correspondent of the St. Louis *Globe-Democrat* thinks his candidacy "has possibilities that may remove it from the machinations of the politicians." "Keep your eye on Coolidge," is the Council Bluffs *Nonpareil's* advice to Republicans. Papers like the Brooklyn *Citizen* (Dem.), Richmond *Times-Dispatch* (Dem.), Louisville *Post* (Ind.), and New York *Times* (Dem.) agree that Coolidge is of Presidential size. The Richmond *Virginian* (Dem.), however, observes that "one bold stroke" does not often make a Presidential nominee, and the Richmond *Journal* (Dem.) and Memphis *Commercial Appeal* (Dem.) assert that the Governor is badly handicapped by the support of Henry Cabot Lodge.

Senator Poindexter, of Washington, threw his hat boldly into the ring on October 26, and issued a platform declaring against radicalism, foreign entanglements, and extravagance. It seems to the Brooklyn *Citizen* that the Senator has by his very frankness destroyed any chance he may have had to become his party's candidate. Other papers like the New York *Times* and Brooklyn *Eagle* are inclined to think that considerations of geography will tell against the Poindexter candidacy. But the Spokane *Spokesman Review* (Rep.), in his own State, calls attention to the fact that elections are no longer decided by New York, that "the Pacific coast is a pivotal region, and any one of the Pacific coast States may be the pivotal point in 1920."

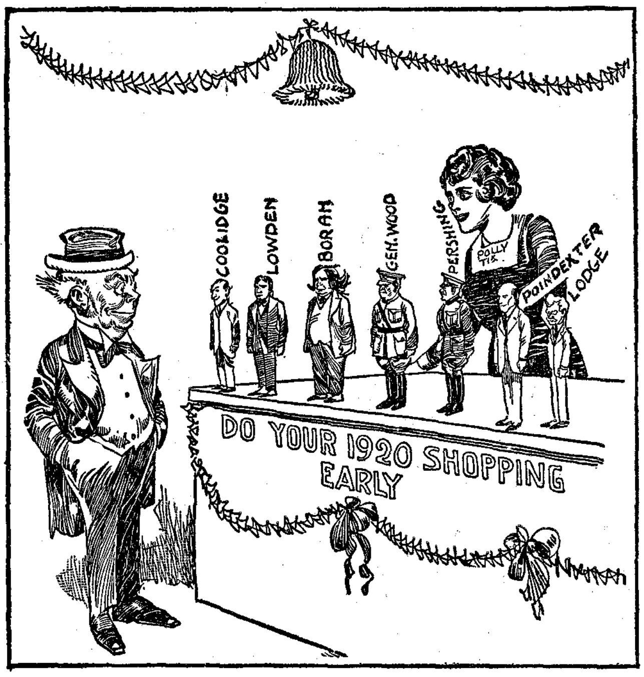
Senator Hiram Johnson similarly came out for the Presidency on December 13. He will "go direct to the people." Senator Johnson has the support of many progressives who look upon him as the true heir of Roosevelt, and also of conservative Republican papers in California like the Sacramento *Bee* and San Francisco *Chronicle*. They like him for his opposition to President Wilson's foreign policies. The St. Joseph *News-Press* (Ind.), however, sees a weakness in the Johnson candidacy due to the fact that some Republicans will ask "why it was that while running for Senator in 1916 he received a plurality of 297,000, while Hughes running for the Presidency lost California by 3,773?"

Another prominent Senatorial candidate is Warren G. Harding, of Ohio, whose friends declare that he is the one man "who can most surely carry" this important State. And the Cincinnati *Times-Star* (Rep.), owned by the Taft family, declares that Mr. Harding has had "that experience and training in public service which is an essential preparation for satisfactory service in the White House." A poll of the Ohio legislature has shown that Senator Harding is the Republican favorite.

Other Republicans who have received considerable newspaper attention as Presidential possibilities are ex-President Taft, Senator Lodge, Senator Knox, ex-Mayor Ole Hanson, of Seattle, and General Pershing. "Mention" has also been made of Senators Lenroot (Wis.), Kellogg (Minn.), Capper (Kan.), La Follette (Wis.), Spencer (Mo.), Edge (N. J.), Cummins (Iowa), Kenyon (Iowa), Borah (Idaho), and Brandegee (Conn.); also of Governors Sproul, of Pennsylvania, and Goodrich, of Indiana; Judge Pritchard, of North Carolina, Chairman Hays, of the Republican National Committee; former Justice Charles E. Hughes, Elihu Root, Frank A. Vanderlip, Nicholas Murray Butler, Charles M. Schwab, Speaker Gillett, H. P. Davison, and William B. Thompson.

That there is more talk of Republican than of Democratic Presidential possibilities appears to a Washington correspondent of the Springfield *Republican* "to be due solely to the fact that the creation of Democratic sentiment has been delayed by uncertainty as to what attitude President Wilson would take toward a third term." The South Dakota Democrats unanimously named Wilson and Marshall as the Democratic Presidential ticket. But the Washington correspondents and most editors are inclined to think that Mr. Wilson will not seek reelection. The Nashville *Tennessean* (Dem.) made a poll of Southern Democratic newspapers last fall on the question of the renomination of Mr. Wilson; sixty per cent. said No, twenty per cent. said Yes, the others qualified their answers or refused to state their position. The Macon *Telegraph* has declared that "Woodrow

Wilson can't carry the State of Georgia for a third term." The influential New York *World* also argues against a third term for the President. If he does run, says the Lancaster *Examiner* (Rep.), "there are many Republicans who will welcome such a fight," but the Evansville *Courier* (Dem.) feels certain that "President Wilson will crown his lifework by refusing a third term." A careful summing up of the assets and liabilities of the most prominently mentioned Democratic candidates appears in the Richmond *News-Leader*. Says this Democratic newspaper, which is certain that the President will not consider being a candidate:



"NO, THANKS, I'M JUST LOOKING."

—Thomas in the Detroit *News*.

"Of cabinet officers, the strongest beyond question is Secretary Lane, who unfortunately is barred by his Canadian birth from being President.

"Mr. Baker is a far more powerful man than many suspect, but as he has to bear the responsibility for the inevitable wastes and blunders of the army organization, he will hardly be an available candidate.

"Josephus Daniels has made a remarkable record as Secretary of the Navy, stood the test of the war magnificently, and has a great fund of common sense, but he has the active hostility of the 'fast' element in the Navy, comes from a State that is unalterably Democratic, is looked down upon by certain 'interests' as the proprietor of a small paper, and will not be accepted by the country at half his worth.

"Mitchell Palmer is gaining in influence in some quarters, but is bringing down upon his head the wrath of the labor world, nor has he yet shown any deep grasp of problems or any long vision. He is a capable organizer and has many qualities that appeal to those who admired Roosevelt, but he probably came into the cabinet too late and at too critical a time to make him a strong candidate next year.

"Mr. McAdoo, of course, is assumed to be an active aspirant and can command a certain following. But some of his characteristics do not appeal to the public, and his administration of the railways have aroused the profound antipathy of financial interests. He is blamed for 'yielding' to the railway brotherhoods, and he can hardly overcome that handicap. Incidentally, if he had not been Railway Administrator, the chances are overwhelming that he would be the nominee almost without opposition, for his work in the Treasury Department was remarkable.

"Beyond the range of cabinet officers, past and present, the Democrats have numbers of men who are superior to any the Republicans are likely to present, but of this abundant timber much is 'green.' Oscar Underwood would be a strong probability but for his stand upon the liquor question, and even here, by a revulsion of feeling in the States where prohibition became effective by Federal statute, he may be acceptable. Of the State Governors, the strongest available Democrat and a man who looms large upon a careful view is Gov. James M. Cox, of Ohio. He comes, as does Harding, from an important State, he is the strongest Democrat in the State (Baker not excepted), and he combines tact and experience with undeniable courage and initiative."

In the November issue of *The Commoner*, William J. Bryan, in an editorial headed, "Wanted: A Candidate," asks "those eligible for the Democratic nomination" to "advance and give the countersign." "Among those who are first for the people and against Wall Street; secondly, for the home against the saloon; and thirdly, for woman suffrage," the Democratic party, says Mr. Bryan, will choose the most available man. These suggestions of Mr. Bryan give rise to suspicions on the part of Democratic papers like the Houston *Post*, Richmond *Journal*, and El Paso *Times*, and of Republican papers like the Milwaukee *Sentinel*, Philadelphia *Inquirer*, and Philadelphia *Press*, that the editor of *The Commoner* is well aware that no candidate would fit such a platform quite as well as himself. *The Commoner* has recently printed a number of letters from readers who want Mr. Bryan to run, but an Eastern Democratic daily like the New York *Morning Telegraph* dismisses Bryan as a man who "is patriotic and means well, but never can get the votes."

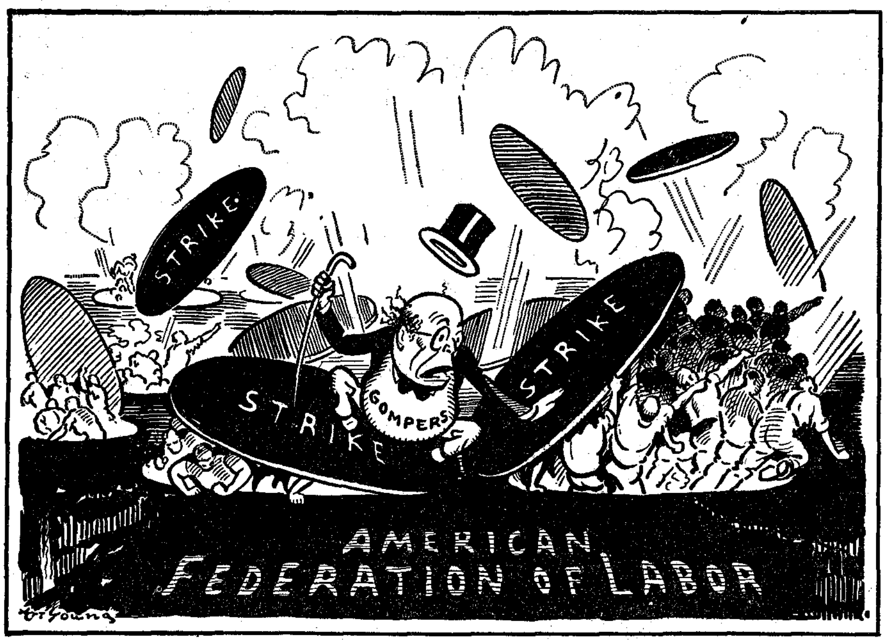
The Democratic party has Ambassadors as well as Cabinet members and ex-Cabinet members among its Presidential timber. James W. Gerard, our former Ambassador at Berlin, came out formally as a candidate on December 15. The Kansas City *Post* (Ind.) has nominated Brand Whitlock in a leading editorial as, aside from his work in Belgium, "a great big American—just the type we need for the White House."

Among other candidates prominently mentioned are Governor Alfred E. Smith, of New York, whose personal popularity and experience in what has been called the "second greatest executive position in our land" are urged in his favor. Several papers believe that Vice-President Marshall is a receptive candidate for the Democratic nomination. The Washington *Star* (Ind.) says "he is standing on his own record, and his friends regard him as a good bet for next year." The El Paso *Times* (Dem.), however, insists that Mr. Marshall has failed to impress the country with the feeling that he is of Presidential stature. It seems to the Paterson *Press-Guardian* (Ind.) in New Jersey that "Champ Clark, of Missouri, is most likely to be chosen" in the next Democratic convention, altho this newspaper observes that "if the Democratic nomination should be given as a reward for the most loyal and distinguished service to the party it would go to Senator Hitchcock, of Nebraska." Other Democratic possibilities that have been mentioned are Secretary William B. Wilson, Senator Owen, of Oklahoma, Colonel House, Senator Chamberlain, Assistant Secretary of the Navy Roosevelt, Secretary Lansing, Secretary Glass, and John W. Davis, our Ambassador to Great Britain.

One name which bears no party label can not be dismissed from political calculations. It is that of Herbert Hoover. Influential independent newspapers like the Springfield *Republican*, New York *Evening Post*, Utica *Press*, Louisville *Post*, and Baltimore *Sun*, point to his record as head of the Committee on Relief in Belgium and as Food Administrator, and urge his nomination by either great party or both. A United Press correspondent asserts that there is considerable Hoover sentiment throughout the country, "and independent clubs, urging him as a candidate, are expected to spring into being." Such an experienced political observer as David Lawrence remarks on Hoover's knowledge of food and prices as an important factor with women voting in so many States. But the Washington correspondent of the New York *Evening Post* tells us that the politicians never speak of Hoover, and he adds that tho our Food Administrator would make a superb "general manager of the United States," the President must be something more. He must be familiar "with public sentiments, public prejudices, public ideas, or instincts about ethics and morals." And whether Hoover could qualify in this field has yet to be shown.

WHAT LABOR WANTS

THE REVOLUTIONARY "borers from within," who planned to capture the American Federation of Labor and light the fires of class-war in America, are not to have things all their own way in the American labor movement. This fact was made clear, editorial observers note, when Mr. Gompers's National Labor Conference in Washington adopted a resolution "repudiating and condemning" the doctrines of Bolshevism and I. W. W.-ism as "destructive of American ideas and impracticable in application." This means, according to a Washington correspondent of the New York *World*, that all unions affiliated with the American Federation of Labor will be called upon to purge their ranks of those extreme radicals who give their allegiance to anti-American methods and teachings. "It is the beginning," says this correspondent, "of just such another campaign as the Federation waged in the early days of the war upon pacifists and pro-Germans who sought to use the labor movement to aid Germany's cause." Other papers enthusiastically welcome this evidence of the Federation's determination to deal drastically with the elements of revolutionary alien radicalism within its ranks. Thus in *The Wall Street Journal* we read:



MR. GOMPERS IN HIS FAVORITE ROLE.

—Young in the New York *Liberator*.

"Along with this winnowing process, the Federation has been making special effort to combat the 'one big union' idea. Its officers have been telling the protagonists of this essentially I. W. W. principle in blunt terms that it is unworkable in a country the size of ours, with its mixture of tongues and racial feelings, its large percentage of illiterate workers of no experience in self-government, and its wide diversity of economic conditions and interests. Intelligent members thereof have no desire to see the Federation again jockeyed into the support of a man like Foster. Among themselves they make no bones about the wrong position of the Federation in respect to certain phases of the steel strike, nor have they any illusions as to the gravity of an internal situation which for the time being paralyzed the intelligent leadership of the organization.

"If the Federation is, indeed, setting its house in order, as surface indications would lead us to believe, it is a time for employers to extend both encouragement and practical support to men of brains and character among the unions. They need not, of course, expect these men to abate their allegiance to their constituents; nothing of that sort is required in the interest either of the general well-being or of the employers themselves."

But when we turn from the conference's anti-Bolshevik and anti-I. W. W. resolution to its declaration of principles we find the response of the press neither so unanimous nor so enthusiastic. "There are many debatable items in the new 'Bill of Rights' formulated by Mr. Gompers's conference," notes the Philadelphia *Public Ledger*, and the New York *Times* calls it "not a Bill of Rights, but a bill of class exemptions and interests." The New York *World* thinks it "a disappointing deliverance, unworthy of the splendid American organizations in whose name it has been promulgated," and finds in it "many propositions to which even Lenine and Trotzky, now that they have established an order of their own more or less secure, would not hesitate to subscribe." But while *The World* is shocked by the radicalism of this document, the Socialist New York *Call* is disgusted to find in it the views of "the old Bourbon generals of the unions who speak a language other Bourbons understand."

It is conceded, however, that this "Bill of Rights" formulated by the representatives of 119 national and international unions, including the railroad brotherhoods, is a document of profound public interest, not only because it represents the political and economic program of 4,000,000 workers affiliated with the American Federation of Labor, but because it claims to point the way to a solution of the present industrial unrest. As Secretary of the Interior Franklin K. Lane recently reminded us, "the race for industrial supremacy is on between the nations of the world"; and this nation enters the race handicapped, according to the estimates of some economic experts, by industrial production only 60 per cent. of normal. Industrial unrest, as manifested in strikes during 1919, estimates a New York *Sun* investigator, has meant a loss to American labor and American capital of about $2,000,000,000. Of this loss, according to *The Sun's* figures, labor's share was approximately three-quarters of a billion, and capital's one and a quarter billions. Hence it is not surprizing to find the Cleveland *Plain Dealer* characterizing this conference, which was summoned by Mr. Gompers after the failure of the first Industrial Conference to agree on the subject of collective bargaining, as "the most important labor conference in the history of the country." Its program, adds the same paper, can not fail to have "a wide influence on the rank and file of laboring people."

Following are the outstanding points in this declaration of what the American Federation of Labor wants and what it does not want:

The Right to Strike—"Powerful forces are seeking more and more aggressively to deny to wage-earners their right to cease work. We denounce these efforts as vicious and destructive of the most precious liberties of our people. The right to cease work, strike, as a final means of enforcing justice from an autocratic control of industry, must be maintained."

The Right of Public Employees to Organize—"The protection of the rights and interests of the wage-earners in national, State, and municipal service requires for them the right of organization. Since the interests of these workers can be best promoted through legislation and administration, their right to organize and affiliate with the American Federation of Labor must at all times be fully safeguarded."

Abolition of Government by Injunction—"Government by injunction has grown out of the perversion of the injunction process. By the misuse of that process workers have been forbidden to do those things which they have a natural and constitutional right to do.

"The injunction as now used is a revolutionary measure which substitutes government by judicial discretion or bias for government by law. It substitutes a trial by one man, a judge, in his discretion, for a trial by jury. This abuse of the injunction process undermines and destroys the very foundations of our free institutions."

Limitation of Judicial Authority.—"We urge that the judges of our Federal courts shall be elected by the people for terms not exceeding six years.

"We assert that there can not be found in the Constitution of the United States or in the discussions of the Congress which drafted the Constitution any authority for the Federal courts of our country to declare unconstitutional any act passed by Congress. We call upon the people of our country to demand that the Congress of the United States shall take action for the purpose of preventing the Federal courts from continuing the usurpation of such authority."

Wages Not to be Based on Cost of Living.—"There is a wide-spread belief that wages should be fixt on a cost-of-living basis. This idea is pernicious and intolerable. It means putting progress in chains and liberty in fetters. It means fixing a standard of living and a standard of liberty which must remain fixt. America's workers can not accept that proposition.

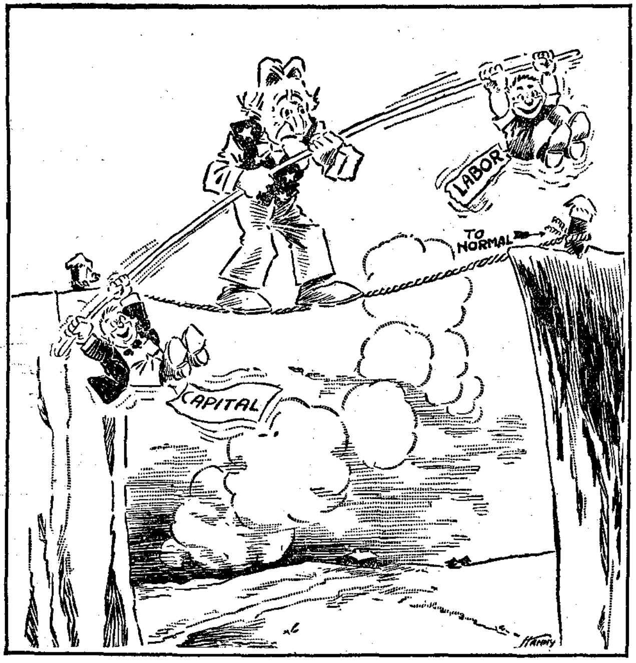
"They demand a progressively advancing standard of life. They have an abiding faith in a better future for all mankind. They discard and denounce a system of fixing wages solely on the basis of the family budgets and bread bills. Workers are entitled not only to a living, but modern society must provide more than what is understood by the term 'a living.' It must concede to all workers a fairer reward for their contribution to society, a contribution without which a progressing civilization is impossible."

Remedies for High Cost of Living.—"Existing high and excessive prices are due to the present inflation of money and credits, to profiteering by those who manufacture, sell, and market products, and to burdens levied by middlemen and speculators. We urge:

"The deflation of currency; prevention of hoarding and unfair price-fixing; establishment of cooperative movements operated under the Rochdale system, making accessible all income-tax returns and dividend declarations as a direct and truthful means of revealing excessive costs and profits."

No Reduction in Standard of Living.—"Labor understands fully that powerful interests to-day are determined to achieve reaction in industry if possible. They seek to disband or cripple the organizations of workers. They seek to reduce wages, and thus lower the standard of living. They seek to keep from restriction their power to manipulate and fix prices.

"Labor must be and is militant in the struggle to combat the sinister influences and tendencies. Labor will not permit a reduction in the standard of living. It will not consent to reaction toward autocratic control."



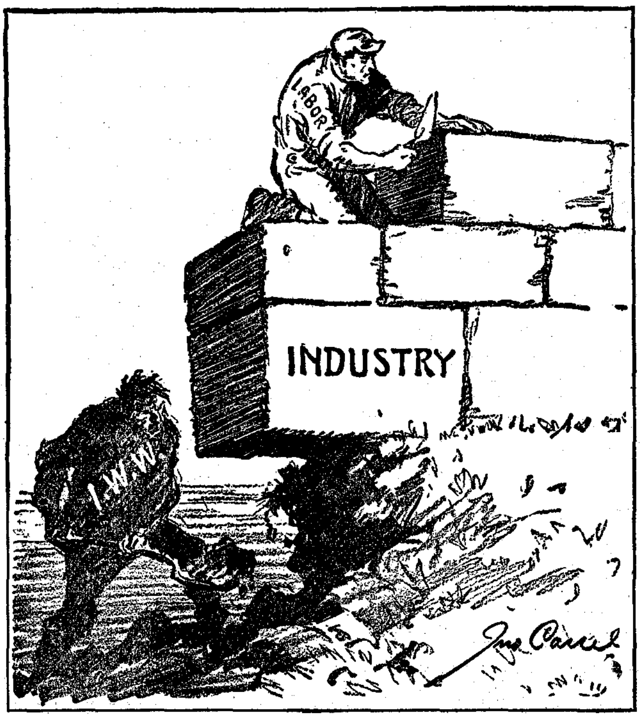
BUT HE WILL MAKE IT.

—Hanny in the St. Joseph *News-Press.*

Cooperation and Collective Bargaining.—"We submit that production can be enhanced through the cooperation of management with the trade-union agencies, which make for order, discipline, and productivity.

"We hold that the organization of wage-earners into trade-unions and the establishment of collective bargaining are the first steps toward the proper development of our industrial machinery for service."

Public Control of Credit.—"Credit is the life-blood of modern business. At present under the control of private financiers, it is administered, not primarily to serve the needs of production, but the desire of financial agencies to levy a toll upon community activity as high as 'the traffic will bear.'



Copyrighted by the Press Publishing Company.

WORKERS!

—Cassel in the New York *Evening World.*

"Credit is inherently social. It should be accorded in proportion to confidence in production possibilities. Credit as now administered does not serve industry, but burdens it. It increases unearned incomes at the expense of earned incomes. It is the center of the malevolent forces that corrupt the spirit and purpose of industry.

"We urge the organization and use of credit to serve production needs and not to increase the incomes and holdings of financiers. Control over credit should be taken from financiers and should be vested in a public agency, able to administer this power as a public trust in the interest of all the people."

Continued Government Control of Railroads.—"Since the Government has not worked out a constructive railroad policy, we urge, for and on behalf of the railway-workers and of the general public, that the railroads be retained under government administration for at least two years after January 1, 1920, in order that a thorough test may be made of governmental operation under normal conditions."

Ratification of the Peace Treaty.—"If the Senate shall fail to ratify the Treaty of Versailles our nation may be isolated from other countries of the world which at some time might be pitted against us. Such isolation and possibilities would make necessary the creation and maintenance of a large standing army and a greater and more effective navy in order in some degree to protect the Republic of the United States from aggression by those countries which were our Allies.

"In addition, the workers of America have a deep interest and concern in the labor-draft convention of the Treaty, and in its purposes to raise to a higher standard the conditions of life and labor among the peoples of all countries. Its cardinal declarations and provisions are, that labor should not be regarded as a commodity; that the eight-hour day and forty-eight hour week are standard; that there shall be one day of rest, preferably Sunday, in each week; that child labor shall be abolished and continuing education for young workers assured; that men and women shall receive equal pay for equal work; that industrial betterments shall be enforced by proper inspection, in which women as well as men shall take part; that wages shall be sufficient to maintain in a reasonable standard of living, as this is understood in each time and country, and that employees as well as employers have the right of association for all lawful purposes."

CAUSES OF AMERICA'S "CRIME WAVE"

A COUNTRY-WIDE CRIME WAVE, reported in the press of such widely separated cities as Los Angeles, Chicago, Philadelphia, St. Louis, San Francisco, New York, Portland (Ore.), and Detroit, has led to serious editorial discussion as to the cause. "Drug fiends, in a desperate effort to obtain narcotics or the money to buy them, cause the present crime wave," says the Los Angeles *Times*, and quotes the city's captain of detectives as saying, "Remove our 2,500 drug-users from the city, and crime will sink at once at least ninety per cent." Another police official in the City of the Angels asserts that drug addicts must have their narcotics, "or money to buy them, and the only means they have to raise the cash are the pistol, the padded club, the dirk, and the jimmy." Various other reasons for the prevalent crime wave are ascribed, ranging from the organized propaganda of sedition with which the country has been flooded, according to the Seattle *Times*, to the fact that, in Chicago particularly, "the street-lights had been dimmed as a result of the coal shortage."

Replying in all seriousness to the charge that "prohibition is responsible for the crime wave sweeping over the nation," a correspondent of the New York *Evening Post* says such a ridiculous charge is probably due to "the fallacy of the universal"—there is increased crime, and prohibition has been passed, therefore prohibition has caused the crime. The correspondent, therefore, goes on to present other reasons:

> "It is the condition that has followed all wars. It is the backwash of the military tides. The psychology of it may be the suspension of the civil law by the military or the suspension of the moral law by the irregularities of war. Another possible reason is the confusion in the period of reconstruction which emboldens the criminal to seek an advantage. Also the explanation has been offered that increase in crime is due to inadequate lighting caused by the coal shortage. It is a matter of history that the illumination of London by gas years ago brought about a notable decrease in the percentage of crime in that city."

The above correspondent, after denying that prohibition causes crime, quotes statistics to show that "the saloon was the most prolific producer of crime known"; that this is the "universally accepted view." The quotation of statistics irritates the New York *Morning Telegraph* to this reply:

> "The assertion that 'reliable statistics show that the saloon was the most prolific producer of crime,' we regard as ridiculous. So far as we have been able to discover, such statistics have no existence; they are made up of the patter, the sounding brass and tinkling cymbals of hot-air orators speaking to throngs at temperance camp-meetings in some grove on a summer afternoon. 'Statistics show,' yells some speaker, 'that whisky causes almost all of the murders in the country.' Whereas whisky probably caused none of the murders. Jealousy, a desire to rob, and sudden anger are the causes of homicide."

Other interesting deductions as to the part prohibition has played in the crime waves are forthcoming, however, among the most ingenious of which is the following, set forth in the Lancaster (Pa.) *Intelligencer:*

> "Does prohibition have anything to do with these crime waves and the getting away with it? There are less arrests now everywhere by fifty per cent. There are less murders. There is less domestic relation trouble, but more divorce. But there are more big robberies.
>
> "Just after prohibition went into effect a leading local criminal lawyer said to the writer: 'Mark this. With the advent of prohibition, we will have much less crime but cleverer crooks. There will be big things doing in the world of crooks and they will get away with it. Under booze the cleverest and most hardened used booze to steady them. When they can't get it, and go about their nefarious tasks with a clear mind and eye, it will be the very d—— to catch them.'"

The fact that, according to the St. Louis *Star*, the police of that city, by trailing suspicious characters, unearthed a so-called crime club—an organized band of thieves and burglars—leads several newspapers to believe that crime in this country has been placed upon an organized basis, and a general plea is made for increased efficiency in the police forces of the larger cities, "where the picking is big," according to one newspaper. In commenting upon the prompt steps taken by the Chicago police to break up a "murder group," the Baltimore *American* points out the fact that seven of the men arrested were aliens of the underworld, who made a practise of organizing in bands for the purpose of preying upon their more successful countrymen. Several of these men have confessed their crimes, and have implicated others. Continues *The American:*

> "These seven have killed and robbed at least five Chicago men and made a very profitable business of it. Most of them are aliens of the lowest type, and the immigration laws should have put a ban on their admission to this country."

The Chicago *Tribune*, after publishing the fact that there had been almost three hundred murders committed in Chicago during the first eleven months of 1919, comes to the defense of its city in the following words:

> "We do confess to more outlawry than we think is our normal share. But we resent the imputation that we proportionately are any more mischievous toward the laws than another American city. In short, we are trying to clean our own hearth without calling attention to our neighbors' untidiness. In a community of glass houses we are trying to keep from throwing stones."

All other American communities should take warning from what the New York *Times* terms "Chicago's wildest orgy of crime," declares the Seattle *Times*, which admits that conditions similiar to those obtaining for a time in Chicago would be the lot of other American cities, including Seattle, "were the police authorities to let up even for a day in their drastic enforcement of the law." The Detroit *Free Press*, praising the energetic action of the police of that city in rounding up all the criminals they can find, pleads for more leeway for the police, giving as an instance of law being enforced to the letter the arrest of a suspicious character by a policeman, and the suspect's subsequent release by a police judge because the officer arrested him without a warrant. Other means of dealing with professional criminals are brought to our attention by the San Francisco *Bulletin*, which says that city's police chief has reduced the day force in order to allot a greater number to the night shift, and that these men are armed with "sawed-off" shotguns and whirled about the city in different makes of high-powered automobiles.

The newspapers of Philadelphia have not waited for other cities to comment upon the crime wave in their city. *The Press* calls attention to an attempt to blow up one church and strip another; a dramatic jewel theft by motor bandits; safe-cracking; the theft of automobiles; the theft of diamond earrings from a woman within a block of her home, and a suburban robbery by another motor bandit—all in one week.

In St. Louis, which does not seem to have escaped the crime wave, *The Star* demands to know why the round-ups of "men known to the police to be criminals, having no vocation except that of law-breaking," are deferred until the "community has been terrorized by wholesale robberies and burglaries." In Portland, Ore., responsibility for the police department in its campaign against law-breaking elements is placed by *The Telegram* on the shoulders of the Mayor. Asserting that there has been too much leniency by the courts in dealing with criminal cases brought before them, *The Telegram* goes on:

> "Speedy arrest, reasonable certainty of conviction, and an absolute surety that punishment will follow where the criminal is of the professional class—all these combined with a police department and detective force really alive and on their toes will correct the impression that Portland is an easy mark for the criminal, and relieve the city of their presence and the epidemic of crime they now inflict."

THE WETS FIND THE WAR IS STILL ON

THE IDEA ENTERTAINED by the wets that the war is over, and the War-time Prohibition Act therefore out of date and null, was rudely dispelled last week when the Supreme Court unanimously declared the act still to be in full force and vigor. The Court holds that Congress did not intend the war-time act to terminate on the conclusion of the war, but at the end of the period of demobilization, which should be announced by a proclamation of the President. In view of the fact that the Treaty of Peace has not been concluded, that the railways are still under war-time control, that demobilization still continues, and that the Lever Food Control Law is still in force, technically we are still at war, and a dull, or at least sober, time for the "wets" apparently is in prospect. If the Senate should ratify the Peace Treaty; if Congress should pass a resolution declaring this country at peace with Germany —and the President agree; if Congress should repeal the War-time Prohibition Act—which it passed by a decisive vote; any one of these remote possibilities, should it come to pass, would enable the "wets" to withdraw their liquor from bond for domestic use. As it is, according to figures from the New York *Sun*, they are likely to lose stocks valued in the neighborhood of a billion dollars, and the Government will lose at least half a billion in taxes. By the decision of the Supreme Court, says the New York *Times*, "the sale of liquor must cease in every place where the ban was lifted by injunctions, such as Louisville, Providence, and New Orleans."

The fact that this newspaper's sentiments have been strongly antiprohibition makes the following extract from one of its editorials all the more striking:

> "It is fortunate and salutary that there was no dissenting opinion. Bitter as is the disappointment of the wets, they can not murmur against this unanimous decision of the highest court. In declaring the statute valid the court reiterates a well-known and essential principle of American constitutional law. It may not inquire into the motives of Congress in passing a statute, or into its wisdom or necessity.
>
> "It is a strong and clear opinion. Even those who, on general grounds, have been opposed to or doubtful of the wisdom of prohibition will be glad that a wild bacchic explosion, a New-year's eve of wastrels, is not to be."

Attention is directed by the Newark *Evening News* to an outstanding feature of the verdict:

> "There is a significant point in the opinion handed down by Justice Brandeis for the court, in which he declares that constitutional prohibition is not only binding on the Federal Government, but also on the States, and that it supersedes State liquor laws.
>
> "That is to say, there can not be regulatory laws in one state and prohibitory laws in another State, but all State laws on liquor that do not conform to the basic principle of the Eighteenth Amendment will be null and void."

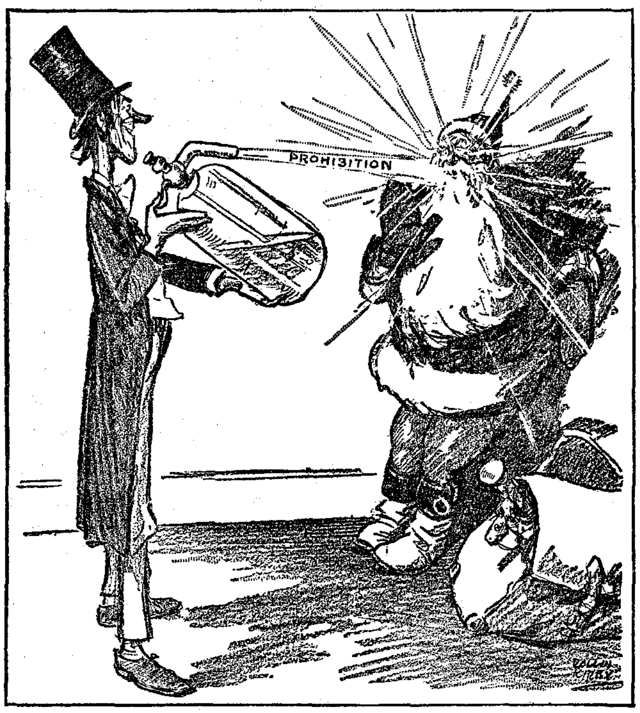
Charges by the liquor interests that their stocks have been confiscated are held to be without foundation, according to the following extract from the decision of the court:

> "There was no appropriation of the liquor for public purposes. The War-time Prohibition Act fixt a period of seven months and nine days from its passage during which liquor could be disposed of free from any restriction imposed by the Federal Government. Thereafter, until the end of the war and the termination of mobilization, it permits an unrestricted sale for export, and, within the United States, sales for other than beverage purposes. The uncompensated restriction upon the deposition of liquors imposed by this act is of a nature far less severe than the restrictions upon the use of property acquired before the enactment of the prohibitory law which were held to be permissible in cases arising under the Fourteenth Amendment."

All the contentions by "wets" that the law was invalid because it was passed after hostilities ceased, and therefore contradicted its own purpose as a war-measure, were swept aside. In the language of Justice Brandeis:

> "Conclusion of the war clearly did not mean cessation of hostilities because the act was approved ten days after hostilities had ceased upon the signing of the armistice. Nor may we assume that Congress intended by the phrase to designate the date when the Treaty of Peace should be signed at Versailles or elsewhere by German and American representatives, since by the Constitution a treaty is only a proposal until approved by the Senate."

Just what will happen to the 55,000,000 gallons of liquor remaining under guard in warehouses is problematical. The New York *World* points out that the stock is distributed throughout the country in 350 distillery warehouses, fifteen general bonded warehouses, and twenty brandy warehouses, and that "it is not looked upon as a desirable undertaking for the Government to guard these warehouses for more than a century, waiting for this liquor to disappear" through leakage and evaporation. Reports from Louisville and Chicago in the New York *Times* indicate that distillers and liquor dealers caught with large amounts on hand are to attempt to ship as much as possible of their stocks to Cuba and there store it. The New York *Courier des États-Unis* adds that Cuban importers are having special storehouses built to receive the consignment, which, in the case of Kentucky alone, "would fill the Woolworth Building from the first to the twelfth story." Export of such a tremendous quantity to Cuba before January 16, the last day of grace, would be impossible, declare shipping experts, and Mr. Dewar, of the Scotch firm of that name, adds that American whisky is not in demand in other countries.



"MERRY CHRISTMAS!"

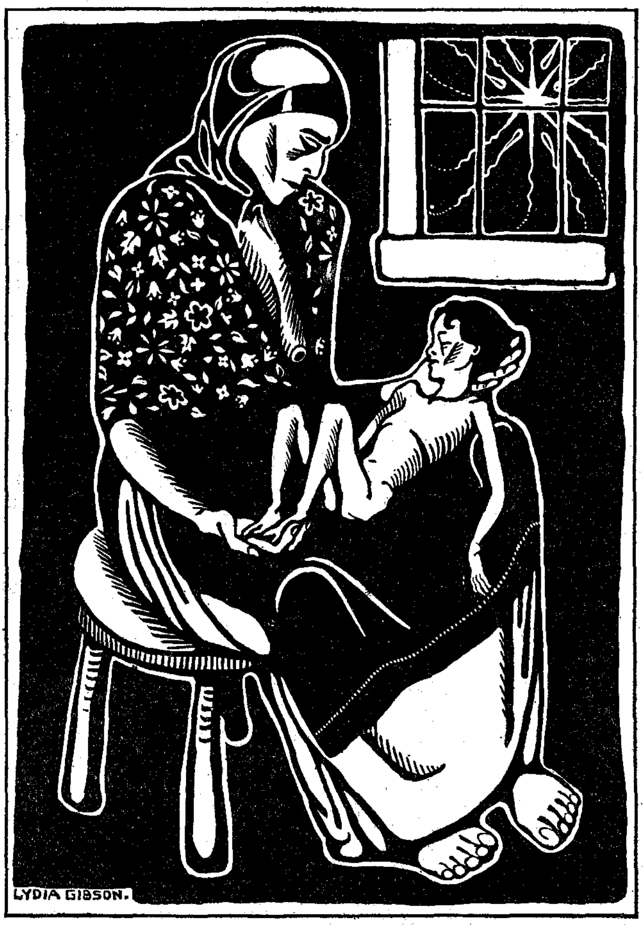
—Kirby in the New York *World*.

Many questions press for settlement, now that the Supreme Court has rendered its decision. The attitude the liquor interests will take is set forth by the New York *World:*

> "Government officials pointed out to-day that one of two fates seems to lie in store for the vast liquor supply if there is no lifting of the ban. They are: It will be bought by the Government and either held indefinitely or destroyed, depending upon the Congressional measure of purchase; or it will be left in the hands of the owners, where it will become valueless property, and eventually will be destroyed by leakage and evaporation.
>
> "Liquor interests plan to make their last fight in Congress and have their wares bought outright by the Government. There is considerable feeling in Congress in favor of this alternative, and many who favor Prohibition feel that the spirit of the one year's grace has been grossly violated by the war-time act."

EUROPE CALLING FOR AMERICAN AID

EUROPE, STARVING AS WINTER COMES ON, and facing financial bankruptcy, looks to America, and America only, for aid. Herbert Hoover has warned us that the loss of life in Europe from lack of food and fuel between now and the next harvest may be greater than during the four years of war. Henry Morgenthau, late our Ambassador to Turkey, has said that "nothing on earth except a miracle from Heaven can prevent the death by freezing and starvation of from 5,000,000 to 10,000,000 people in Europe and the Near East this winter." Premier Lloyd George, as *Commerce and Finance* (New York) reminds us, "draws a doleful picture of the war-wrecked Continent and declares American aid is vital." Sir George Paish, one of England's chief financial authorities, paints a similar picture, declaring that "the people of Europe can not support themselves without the continued grant of credit for the purchase of urgently needed food and raw materials," and that "the claims of humanity demand that America in one way or another—by banking credit, by private loans, or government loans—should supply Europe with the food and material she needs in this great emergency." And, says Mr. José Bornn, Jr., in one of a series of articles in the New York *Evening Post's* Foreign Trade section, "while the bankers, financiers, and the government officials of this country are in turn making and turning down proposal after proposal for the financing of reconstruction in Europe, Europe itself is rolling on slowly but inevitably to that disaster which only prompt, positive, and energetic action on the part of the United States can hope to minimize." This writer continues earnestly, presenting facts and figures regarding Europe's needs:


LYDIA GIBSON.

CHRISTMAS IN EUROPE, 1919.

—Lydia Gibson in the New York *Liberator*.

"Europe's foreign credits have been strained to the point of exhaustion during the five years of war-conditions, due to the almost complete stoppage of exports during the war and the necessity for greater importations than were ever made before. Not only was national wealth mortgaged to a dangerous degree, but the great bulk of Europe's accumulated wealth was spent, all for destructive purposes.

"The lessened food-production in Europe this year left the people of Europe with a shortage of forty-five per cent. in their foodstuffs requirements, and it would require 4,275,000,000 bushels of grain to make up this shortage, of which the world has to offer only about 1,000,000,000 bushels. At the present cost of grain and of transportation it would cost Europe roughly $3,000,000,000 to purchase what grain the world has available for export over and above its own barest requirements.

"There is on top of this a shortage of coal throughout Europe amounting to something over 200,000,000 tons. The coal situation is only a degree less serious in its possible consequences than the food situation. The lack of coal, which in Europe is still the principal source of power for transportation and for industries, means a reduction to just that extent of production. It reduces the earning power of the people and of industries and reduces the Government's revenue because of the decreased taxable earnings. The ability of the nations of Europe to meet their foreign obligations is dependent entirely on the ability of their people to produce for export and to produce for home consumption so as to eliminate the necessity of heavy imports. Without coal and without production, furthermore, unemployment, the breeder and the stimulant to social disorders, would follow. Already Bolshevism, as well as all the milder forms of labor unrest, honeycombs all Europe. . . . But to purchase from abroad at present prices and at present freight-rates the 200,000,000 tons of coal or other fuel which Europe needs would cost roughly $6,000,000,000.

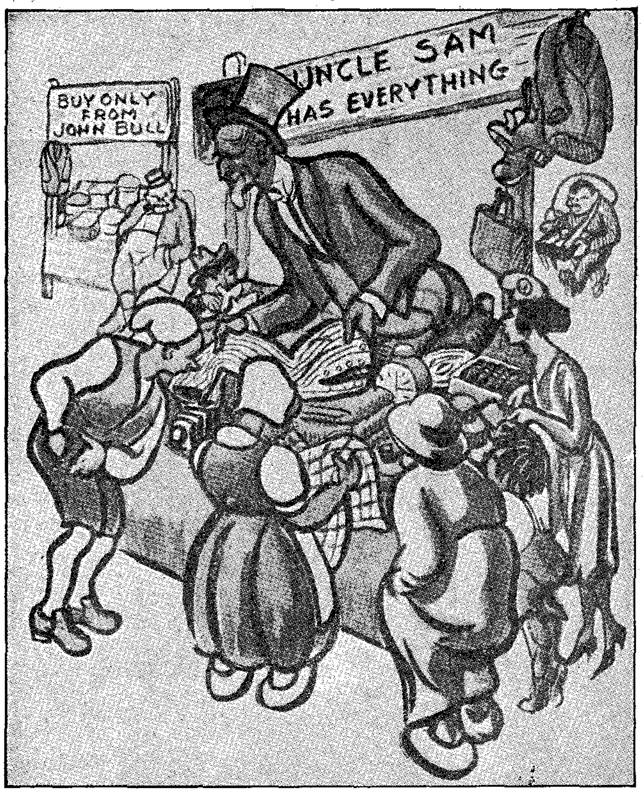
"Thus to purchase their food and fuel requirements alone, the nations of Europe require at least another $9,000,000,000. Under the conditions prevailing it does not seem that such a sum can be raised by private financing in this country or anywhere else. Rather it is a matter for the Government to handle without exacting any definite security, much as it provided the $10,000,000,000 credit to the European nations during the war. . . . What is needed would seem to be a clearer realization in this country of the crisis which Europe is facing to-day and the definite establishment in the public mind of the fact that the things for which this country fought and bled in the world-war are to-day in as great, if not in greater, danger than they were in 1916. When America's duty in the matter is clearly established action may be expected to follow in short order."

Europe's salvation, we read in a statement issued by the Mechanics and Metals Bank of New York, "depends upon her ability to export, and she can not export until she has first imported enormously. As for importing enormously, she can not go on doing that unless some satisfactory basis of credit is established. To set in motion the machinery of civilization in Europe, then, American finance and statesmanship, as well as American industry, must be called into service." The problem, as Chancellor Bonar Law told the House of Commons the other day, has two aspects: "First, provision for immediate relief; secondly, economic reconstruction of the countries in question." As to the first part of the problem, said Mr. Bonar Law, the Allies are doing all they can with their limited resources, by the direct supply of food, by the organization of railway transport, and by trying to stimulate commercial exchanges between the new states. And, it may be noted, Allied plans for feeding Austria are being put into effect. Our present duty to help feed Europe this winter is eloquently urged by the New York *Commercial* and *Sun* and the Savannah *Press*. The New York *Journal of Commerce* calls attention to the report of the committee on foodstuffs at the Atlantic City Trade Conference, which asserted that America must keep on feeding Europe for another winter, and that "there exists, or will be produced during the period," a sufficient American surplus to provide the food needed. But the second aspect of Europe's problem, Mr. Bonar Law told the Commons, is "more difficult":

"Everything depends upon the possibility of organizing international financial assistance on a larger scale. This must depend entirely upon assistance that may be rendered by the United States Government."

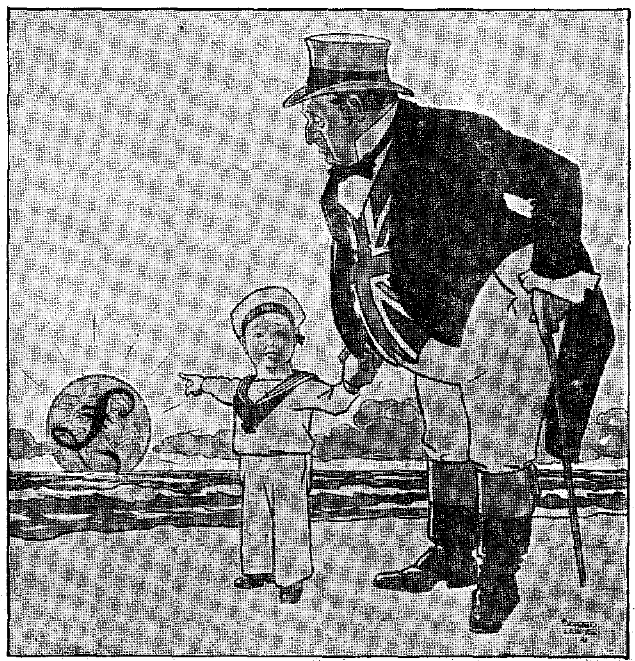
The most striking symptom of Europe's serious economic and financial ailments is the sensational depreciation of foreign moneys. The extent and the causes of the decline in foreign exchange have already been discust in our columns. Newspaper readers noticed last week that the English pound sterling, normally worth $4.86⅝, went as low as $3.66, while the German mark, with a par value of $.23⅞, actually went below two cents, and the Austrian crown, normally worth $.20⅓ went down to half a cent. Such prices, various editors observe, threaten chaos in the world's business. In particular, *The Financial World* notes, the situation "spells almost famine prices for our goods in all European markets." European manufacturers, we read, "need our raw materials as never before, and have to pay double, triple, and quadruple prices for the same. The buying power of the people, wracked and torn by war, industrial strife, and Bolshevik agitations can well be imagined." Bankers and financial writers in this country and abroad agree that foreign exchange can not come back to anything like a normal level until there is an end of inflation in Europe and until Europe begins to produce and to export her products to such an extent as to cut down the enormous American balance of exports over imports. But before Europe can produce she must have money to pay for raw materials and rebuilding. This means that she must have money and credit in huge amounts from America, now the one great country with any surplus funds to invest.

How to furnish financial assistance to Europe on the scale needed is a problem which has been engaging the attention of our financiers in Washington and New York for months. Some relief will be afforded by the reported decision of the Treasury to postpone payment of interest on loans to European governments for a term of years. This phase of the problem is also notably assisted toward solution by the passage of the Edge Bill facilitating the organization of corporations to promote and finance foreign trade. Following the Atlantic City Trade Conference, a national committee on European finance was formed, consisting of some of the foremost bankers, business men, and publicists in the country, and headed by Harry A. Wheeler, of Chicago, and James S. Alexander, of New York. Editors of financial papers have been pleading with their readers for support for such loans as may be floated. An investors' magazine like *The Odd-Lot Review* reminds its readers that European countries helped build up our industries in the past by investing in our securities. Now the shoe is on the other foot, and "it is up to the American investor to return the good deed and help Europe out in her time of trouble." "No time should be lost in making public offering of properly secured bonds in this country to finance Europe's purchasers" says *Forbes' Magazine* (New York); "it is just as imperative and patriotic a duty for you and me to subscribe for such securities as it was to buy Liberty bonds." Other periodicals, like *The Michigan Manufacturer and Financial Record* (Detroit), point out the benefit of such an investment to the individual investor and to this country. Some writers insist upon the necessity for loan conditions that will appeal to the shrewd investor. Others call for a nation-wide campaign to educate investors about foreign business conditions. The Boston *News Bureau* sees the need of such a campaign—plus a personality; "a large popular loan could indubitably be hung on some great, human, appealing personality capable of radiating smiling optimism while he presented his nation's balance-sheets and assets and asked for a short loan thereon." *The American Banker* (New York) suggests that a popular loan "could be put through under government supervision and operated under the guidance of a working committee of bankers and business men, similar to the Liberty Loan organization." There is a difference of opinion as to how far the Government should be involved in such a campaign. It is argued, on the one hand, that the job is too big for private capital, and on the other—and this seems to be the accepted view in Washington—that government aid should be dispensed with by business both for its own good and for the sake of governmental economy.



THE WORLD MARKET.

—Rost in the Munich *Jugend*.



"WHERE DOES IT GO FROM HERE, DAD?"
"IT GOES WEST, MY SON!"

—Leete in the London *World*.

But there are financial authorities who are skeptical about the success of a great loan campaign. A writer in the New York *Journal of Commerce* calls attention to "the increasing reluctance and indisposition on the part of the investors to furnish funds for foreign financing." Large investors, we are told, do not now consider Europe an "investors' country." "A good many of them are worried by what they have read about social unrest, labor difficulties, and the like." And the speculator who is willing to take risks "finds plenty of openings in the United States to-day, or, if he is bent on foreign operations, he finds many South-American countries that are ready to offer him very large interest on his money if he will only leave it with them."

Just as these speculators prefer to "see America first," so we find a number of newspapers adopting the same motto. "We must feed and clothe the world, but we must feed and clothe America first," concludes the New York *Evening Mail.* The Montgomery *Advertiser* similarly contends that "right now our duty is at home," and that while we should help Europe as much as we can, that duty is secondary. Another Southern paper, the Charleston *Gazette*, admits the national sympathy for the stricken, downtrodden, and hungry people of Europe, but it has "a creepy feeling about this matter, based upon the following considerations": that we have already helped Europe with American money "about all that it is safe"; that we need our billions for good roads, new factories, and railway and waterway improvement; that the League of Nations was to have been our security for these loans, "do we want to loan large sums to nations leagued together unless we are in the League?" Finally, this proposition "seems to come from a coterie" representing Wall Street and great wealth, who "may be right" in this matter, but whose motives need to be looked into. The San Francisco *Chronicle* declares that salvaging Europe "is not necessarily a duty which this country should assume." Several editors quote the statement of Secretary Glass in his recent annual report:

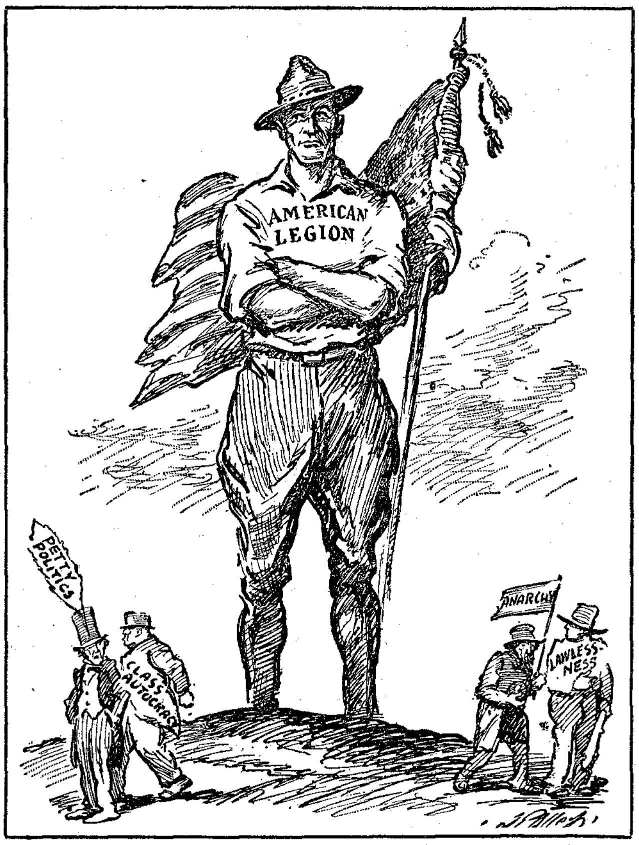
> "The Treasury believes that the needs of Europe for financial assistance, very great and very real tho they are, have been much exaggerated, both here and abroad. We must all feel deep sympathy for Europe. But we must not allow our sympathy to warp our judgment, and by exaggerating Europe's financial needs make it more difficult to fill them."

This, says the New York *American*, is exactly the view-point of the Hearst papers. *The American* goes on to say that if "in spite of Europe's condition after the war she continues a course of intrigue and imperialism, land-grabbing and warring, persecution and pogroms, all against principle and common honesty and prudence, then Europe is not entitled to our sympathy, and, above all, to great sacrifices on our part to support her in such wilfulness." Even in London the New York *Evening Post's* financial correspondent suggests that Sir George Paish overlooks "a vital factor, namely, Europe's extravagance," when he recommends the immediate grant of wholesale credits to Europe. Finally, in financial circles the editor of the Boston *Commercial* calls for the adoption of the "America-first" slogan. Our capital, he says, could much better be employed at home; "let us return to the policy of building up America." And he continues:

> "Sympathy with Europe has gone about the limit already. If the people over there would go to work their countries soon would be able to earn and build up a lot of the credit they need and draw more from the rest of the world, making it less necessary for them to lean on America.
>
> "To get down to banking principles, is any country entitled to foreign credit when it is paying unemployment benefits to strikers? Who wants to lend his money in a country that is governed by Socialists who advocate the confiscation of all private property?
>
> "American business men, farmers, and wage-earners had better make up their minds that the one country for them to finance and build up is their own."

ANOTHER WARNING TO THE LEGION

GENERAL PERSHING'S WARNING to the American Legion against permitting itself to become "a political tool in the hands of political aspirants," voiced when that virile organization was in its infancy, seems to have borne fruit. At least, the Legion's skirts (or shall we say O. D. overcoats) have been kept clear of politics, but unwise counsel from certain newspapers, and, in the Centralia incident, from an army officer of high rank, to "Leave the Reds to the American Legion," appears to have led these impetuous and patriotic youngsters to look upon themselves as the unofficial police of America. Prominent newspapers throughout the country have therefore issued another warning to the Legion not to accept unintelligent advice from either the press or any organization or person. "Two wrongs do not make a right," asserts the Minneapolis *Journal*, in referring to a raid by Legionaries on a radical book-store in Minneapolis. "Law, and not violence, is the weapon with which to meet violence; the Legion should devote itself to its announced program."



THE NEW NATIONAL FIGURE.

—Alley in the Memphis *Commercial Appeal.*

It is suggested by the New York *Evening World* that members of the Legion who set at naught the platform adopted at the Minneapolis convention be punished by expulsion from the Legion; "a few public expulsions would be more convincing than a few mere reproofs," thinks *The Evening World.* Continuing, this paper says:

> "It becomes more and more evident that State and national officers of the American Legion should be vested with disciplinary powers and should use them.
>
> "In St. Louis five members of the Legion acting on their own initiative attempted to prevent the assembly of the convention of the Committee of Forty-eight and threatened violence if it were held. Officials of the Legion later made it clear that these men were not acting for the Legion and did not represent the Legion. This incident is only one of many similar reported from various parts of the country, including New York.
>
> "Such actions do not represent the will of the Legion. But they are hurting the present growth and the future influence of the Legion. The Legion should have protection against hotheads and reactionaries within its ranks who discredit the really fine aims of the organization.
>
> "The Legion has an opportunity such as no body of young men ever had. If wisely led, it can mold this country to its will. It can dictate policies and require performance. It can make America bigger, better, and more American. But the way does not lie mid hate, bigotry, repression, and riot."

"The Legion's course in public affairs," says the Peoria *Transcript*, "like the course of true love, will not run smoothly." On the Pacific coast, the Portland (Ore.) *Telegram* agrees with the Mid-Western paper, and voices the belief that the Legion will be able to "deal to organized anarchism the same sort of death-blow which it dealt to organized Prussianism—but in a different way." The Seattle *Times* reminds the Legion that "violence is the I. W. W. way of doing things," and declares that the Legion will have to depend upon its great moral force to enforce the laws. On the Atlantic coast the New York

World, after calling attention to the attitude of the Legion in presuming to dictate "in matters of assembly and amusement, always in bad taste and frequently with lawlessness," issues the following sound advice, for the future good of the organization of ex-service men:

> "If the American Legion as a body hopes to keep the good name and public confidence that it deserves, it will quickly make its influence felt in restraining such members as assume for themselves superlegal powers toward the community. It can not afford to have its reputation compromised by small groups of individuals recklessly misled into disregarding the rights and liberties of others.
>
> "The young agitators who warned the Mayor of Louisville not to permit Fritz Kreisler to give a concert in that city could not have intimidated a mayor who had the courage and independence to do his duty. They won their way by threats of terrorism and mob rule. In a fight at Bogalusa, La., between members of the Legion, growing out of the deportation of a man charged with radical views, three men were killed and a dozen seriously injured, and at several other points raids on Socialist quarters have been attended by scenes of violence.
>
> "These incidents point to the establishment of a system of lynch law at the caprice of a few hot-headed persons who conceive that the salvation of the country lies in their hands. The spirit is spreading, as was shown again at Ithaca when members of the Legion tried to overpower the police and break up a Kreisler concert that came under the ban of their displeasure. It is a spirit that must be checked. For its own good, the American Legion, with all the authority that it possesses, should at once take the lead in teaching its members respect for the law as a fundamental principle of the organization. In the face of these growing abuses, it will remain silent at the risk of incurring general discredit."

Similar in tenor is the advice offered by the Rochester *Post-Express*, in commenting upon the hostile attitude of the Legion in some parts of the country toward Kreisler. After calling attention to the circumspect and altogether admirable behavior of Kreisler after this country became engaged in war, during which the violinist often appeared at Red Cross and other charitable performances, *The Post-Express* has this to say: "Unless the Legion has wiser leading than this, the potential usefulness of the organization will be destroyed before it has begun to play the part expected of it in civic affairs."

TOPICS IN BRIEF

The burning question in this country is what to burn.—*Arkansas Gazette.*

As a rule the kind of workmen who talk of revolting are.—*Greenville (S. C.) Piedmont.*

Air is still free, but it costs so much more to remain able to breathe.—*Albany Journal.*

A good program for the United States this winter: Export—import—deport!—*Seattle Times.*

The wets in Congress who voted dry are badly disappointed in the Supreme Court.—*Washington Post.*

Trouble with the walking delegates is that they do not walk far enough. —*Boston Shoe and Leather Reporter.*

Alexander Berkman and Emma Goldman want to stay in America to tell us what a bad place it is.—*Arkansas Gazette.*

After all, we don't think capital ever worked labor as effectively as the radical labor-leaders are working it.—*Columbia Record.*

In many localities the paper shortage is causing one newspaper to flourish where two languished before.—*Topeka State Journal.*

Carranza should reflect that if our armies enter Mexico it may not be so easy to drive them back into dry territory.—*Columbia Record.*

A White House bulletin says that President Wilson is keeping in touch with the labor situation. No wonder he's still sick.—*Manila Bulletin.*

With wood so scarce and high, maybe it would be a measure of economy to leave the ex-Kaiser alone until the winter is over.—*San Antonio Light.*

With coal and other precious things kept in the cellar, the second-story worker is liable to practise revision downward.—*Washington Herald.*

Those Holland papers that object to giving up Wilhelm Hohenzollern may think he will be a good asset in the tourist season.—*Denver Rocky Mountain News.*

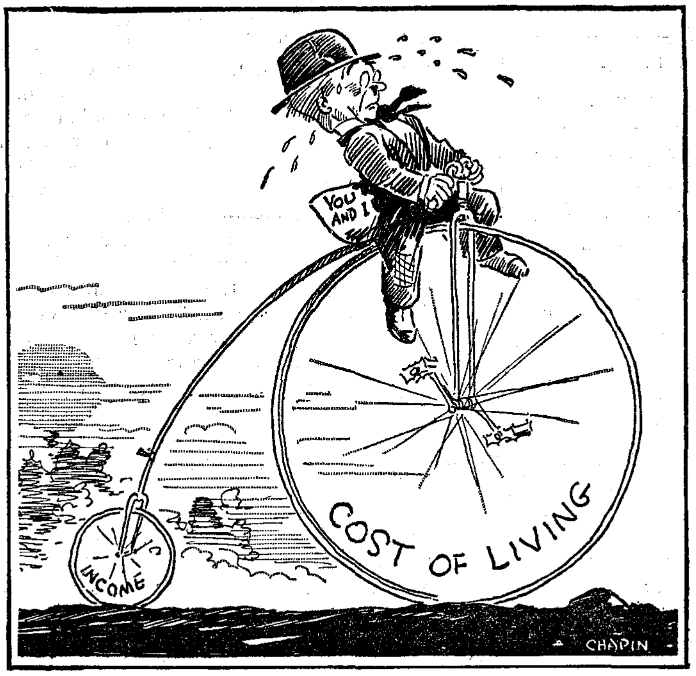
The Roosevelt boys have started up a chain of coffee-houses. We suppose young Ted is figuring on a third cup of coffee sometime.—*Columbia Record.*

The new Labor party might add to its popularity among outsiders by adopting the slogan, "Let's all quit talking and go to work."—*Topeka State Journal.*

Conan Doyle says he believes "there may be alcohol in the next world," but we'd like to know particularly which one he refers to.—*Columbia Record.*

More than two billion passengers rode on all the New York car-lines during the fiscal year just ended. Of this number it is said that several got seats.—*Tacoma Ledger.*

The Bolsheviki in America number among their plans the destruction of all jails. They must hurry unless they expect to work from the inside.—*Topeka State Journal.*



"SOMETHING TELLS ME I'M ABOUT TO TAKE A HEADER."
—Chapin in the St. Louis *Republic.*

There'll be fewer busted resolutions in 1920.—*Columbia Record.*

Germany lost the war, but she's going strong to win the peace.—*Columbia Record.*

Prices are teetotalers. They will not take a drop.—*Greenville (S. C.) Piedmont.*

Why not send the Reds to Mexico and let nature take its course?—*New York World.*

General Wood didn't get across, but his friends hope to put him over. —*Baltimore American.*

The world will be nearer the millennium when war becomes as hard to make as peace.—*Arkansas Gazette.*

Nineteen-twenty is near, so here's a slogan for the girls: "Do your leap-year popping early."—*Columbia Record.*

Even the old artifice of making faces at the coal-cart driver fails of its purpose in these degenerate days.—*Louisville Times.*

It seems that many fail to realize that freedom of speech is for those who know the speech of freedom.—*Norfolk Virginian-Pilot.*

Receivers are sought for idle coal-mines. They do not need receivers. They need outputters.—*Financial America (New York).*

While the Allies are debating what to do with Bill Hohenzollern, we'd like to get the loan of him to chop wood for a spell.—*Columbia Record.*

The fogs of London have a picturesque quality that is lacking in the fogs that hang about the Capitol at Washington.—*Long Island City Star.*

It cost the miners $60,000,000 and the operators $12,000,000. And what bright little lad can tell us who is going to pay?—*New York Tribune.*

"More dough for less dough" might well be the slogan of the United States Grain Corporation.—*Philadelphia Evening Ledger.*

We are all asked to save coal. All we need in answer to this ringing appeal is some to save.—*Detroit News.*

One of the queerest things about this League of Nations is that our Allies, who at first didn't want it at all, now seem to want it more than we do.—*Tacoma Ledger.*

Indication that the world is once more settling back into a normal, prewar state is shown by the announcement that Great Britain will shortly launch the world's largest battle-ship.—*Detroit News.*

A reliable contemporary announces that "there are 300 active volcanoes in the world, most of them, however, being quite small." The same thing might be said of Presidential booms. — *Washington Post.*

President Carranza, one writer asserts, figures on cementing the contending Mexican factions by a foreign war. He might recall that such was Austria's ostensible effort in forcing war with Serbia back in 1914. — *Nashville Southern Lumberman.*

FOREIGN - COMMENT

BRITAIN ABANDONS RUSSIA

"IN WHICHEVER DIRECTION WE GO we are marching into a fog," Premier Lloyd George frankly confessed in the House of Commons during a discussion on the Russian problem. Speaking as a Briton, familiar with fogs, he means that the British Government can make no satisfactory progress in getting out of the Russian problem now they have got into it. Some recall with grim irony that the same quandary of entrance and exit in the snow-bound empire of the steppes not only cost Napoleon 400,000 men, but, what was esteemed more regrettable in those days, touched his prestige with fatal blight. Mr. Lloyd George asked: "Will any wise man advise us to undertake the terrible responsibility of restoring order in a country as large as Russia, where no country ever intervened without landing itself into disaster? I can not undertake such responsibility." He pointed out, moreover, that to-day there are countries "in a much better position to help Kolchak" than Britain, and they are in the alliance. He did not wish to be considered as criticizing them, but "if there has been failure, it is not our failure," he said, and added:

"Our own country is our first concern, and there is no surer road to Bolshevism at home than financial bankruptcy. We have contributed more to anti-Bolshevik elements in Russia than France, Japan, and America put together. I boast of that because it was an obligation of honor for us."

From the Manchester "Guardian."

RUSSIA'S MASTER.

As Allied intervention fades, Lenine stands before the Kremlin, which Napoleon on his invasion watched in flames.

The Premier admitted that France and England are in agreement to withhold further supplies from Russia, because, as he explained, it is impossible further to burden the French taxpayer. He spoke of the almost insuperable difficulties of formulating a policy when on one side there are anti-Bolsheviki like Kolchak and Denikin fighting to reknit and reunite powerful Russia, and on the other side border states equally anti-Bolshevik, seeking their own independence, and therefore the disintegration of Russia. The Premier said further:

"We are faced by three claims for intervention. The first and second are Russia and Armenia, and those opposing intervention in Russia advocate intervention in Armenia. Armenia is a good cause, and Britain is one land able to restore a semblance of justice and good government. But can we do all these things, considering our great burdens?

"The third case is the Baltic Provinces, where the Germans must be cleared out or the peace of Europe is unsafe."

A concise and informing sketch of the military year of Russian Civil War was given by the Premier, who strest the fact of its "abnormally swaying" character, and related.

"Early in the year Admiral Kolchak's army had crossed the Urals and advanced beyond Perm, and a junction with General Denikin in the south and the Archangel forces in the north was regarded as imminent, while an advance to Moscow before the winter seemed quite within the limits of practicability. At that time General Denikin was only just holding his own in a limited territory on the eastern shores of the Black Sea. Now Admiral Kolchak has retreated 660 miles and General Denikin has swept the Bolshevik armies from a vast and fertile region covering thousands of square miles. Within the last few weeks he has lost some ground, but he still holds by far the greater portion of the recovered territory. We are far too apt to examine the fight in Russia in the light of our experience of the great struggle in France. There an army of the size of General Denikin's or of that of his Bolshevik foes would hold a front of a little over fifty miles with well-organized communications behind. Here, such an army has to hold a front of 1,300 miles, with a vast country behind thoroughly disorganized, often overrun by marauding bands, who temporarily capture and loot great cities in the recovered territories. The vast majority of the population feel no ardent loyalty for either side, and very quickly change their allegiance. There is the further complication of provincial or national movements like Petlura's. The result is that General Denikin has not so far been able to establish administrative control over the conquered territories. That makes trade in this very important region for the supply of food and raw material for the present almost impracticable. I might also add that the absorption of the railway equipment in the supply of the armies adds to the difficulty.

"It is the policy of the Government to open up trade and commerce as much as possible with South Russia, in the interest not only of Russia, but of the world."

The high cost of intervention in Russia appears in the statement of the Premier that—

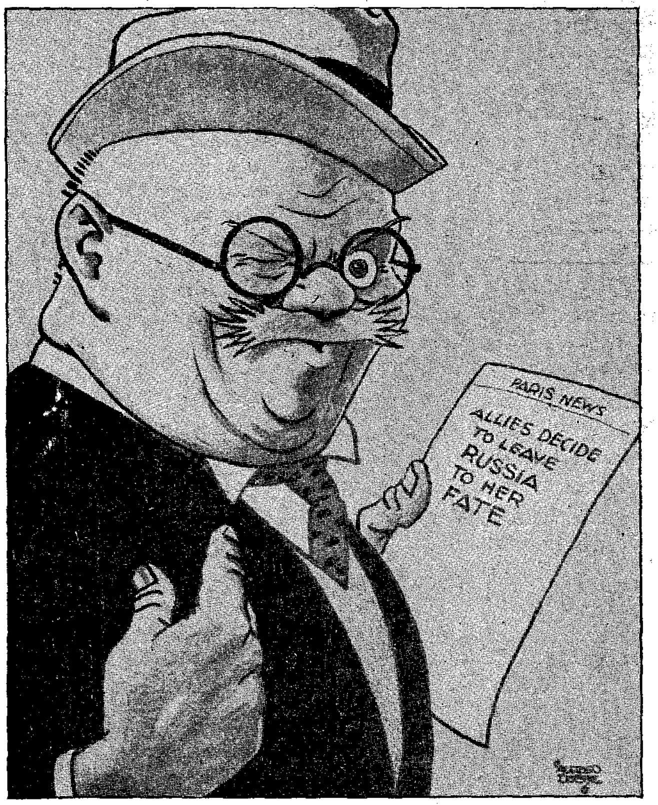
"Between the date of the armistice and the end of October, in cash and in kind, the value of nearly £100,000,000 has been spent or sanctioned by the United Kingdom on account of assistance sent to Russia. A substantial part of this sum has been, or will be, added to the permanent indebtedness of this country. The Government has repeatedly made it clear to the House of Commons that, with the crushing financial burden already cast upon it by the Great War, it can not contemplate the assumption of new obligations under this head. As the Chancellor of the Exchequer explained in the White Paper and in his speech, there is no provision made for such additional expenditure on Russia. If an addition is to be made to the national obligations under this head it will be the responsibility of the House of Commons to determine the additional taxation that shall be imposed for the purpose.

"On the other hand, the Government has an overwhelming sense of the importance of bringing peace to Russia. Not only is Russia a source of unrest and disturbance to all its neighbors, with all the infinite possibilities for mischief which lurk in such a condition over so vast an area, but a settlement of the Russian problem is essential to the reconstruction of the world. Russia is one of the great resources for the supply of food and raw material. The present condition of Russia is one of the contributing causes to the present high prices, and high prices are undoubtedly in all lands the most dangerous form of Bolshevik propaganda. There are also many indications that German reactionaries are using the present strife in Russia to strengthen their influence with all the struggling parties alike in that country, and I have no doubt that if the struggle continues the military party in Germany will secure a great hold in Russia through the medium of the very numerous bodies of demobilized officers and non-commissioned officers out of work, who will find ready employment in that country if the war proceeds. From the humanitarian point of view it is no less important, in the opinion of the Government, that civil war, which is not only destroying the economic life in Russia and thus impoverishing the world, but is slowly decimating its inert and helpless population, should be brought to an end as soon as possible."

Small mercy, however, is shown Mr. Lloyd George in the London Socialist weekly *Justice*, which charges that by his recent utterances on Russia he has "proved himself to be one of the shiftiest and least reliable of the lawyer politicians among whom he cuts so prominent a figure. His very brilliancy and dexterity only serve to make him a greater power for mischief." The Socialist London *Daily Herald* speaks of the "amazing victory" won by the Reds in Russia, and wonders why "labor in England looks on and allows our rulers to continue an illegal war and an illegal blockade." Meanwhile, "snow is falling in Russia, and that sentence means that the deaths of hundreds of thousands during the next six months will lie at our door." Equally severe a critic of Mr. Lloyd George is the ultra-Tory London *Morning Post*, which says that in announcing the desertion by the Allies of Admiral Kolchak and General Denikin, he announces, in fact, the "defeat of the Allies in the East." The London *Daily Telegraph* in less acrid tone expresses similar regret and says "we can only await with misgiving the political consequences of a step which, however it may ultimately result, means an immediate accession to the prestige of the vilest tyranny in Europe."

The London *Westminster Gazette* finds the Allies caught between "two tyrannies of Bolshevism and anti-Bolshevism." With the first acquaintance is general, but before "we back the anti-Bolsheviki," we must be sure what they are aiming at, and this newspaper proceeds:

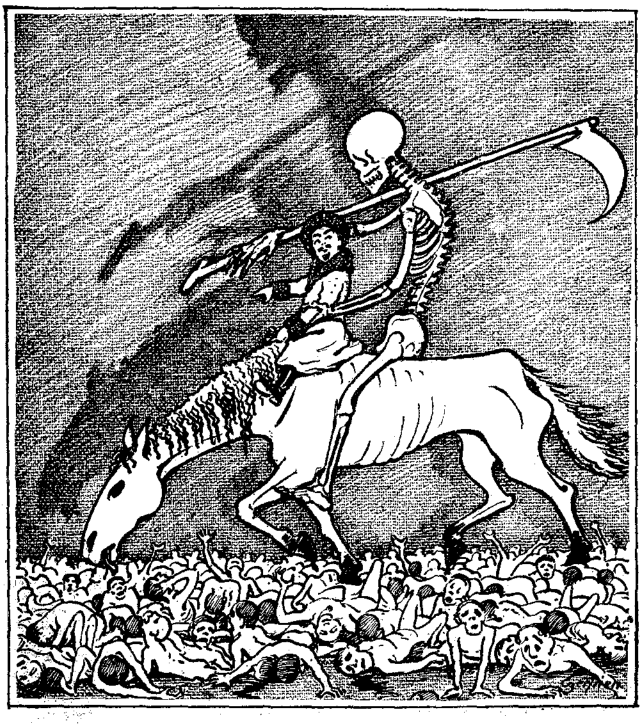
"And here also we appear to be in a mist of illusions. Kolchak and Denikin may personally be all that their friends say, but surrounding them is a vast company of adherents of the old régime, who want nothing but to get back their land and their property, who say frankly that the Red dictatorship must be followed by a White dictatorship, and who decline to make any compromise of the old indivisible Russia for the sake of a democratic federalized Russia."


PARIS NEWS
ALLIES DECIDE TO LEAVE RUSSIA TO HER FATE

"HER FATE!"

—*The Bystander* (London).

The Manchester *Guardian* agrees with Mr. Lloyd George that it would be folly for England to beggar herself in the attempt to suppress Bolshevism by force in Russia, when "by so doing we should create at home the very conditions out of which Bolshevism springs." The very sufficient reason, however, why England should not spend money and life in putting down the existing Government of Russia by force is that the nation will not permit it, and this daily proceeds:



LENINE TRIUMPHANT.

Anniversary souvenir of the Russian Revolution.

—*Nebelspalter* (Zurich).

"The whole policy of intervention has long since been discredited in this country, and it is only by an abuse of power that the Government has carried it on so long.

"For one nation to intervene by force in the internal affairs of another nation which has done it no wrong is, after all, no slight matter. To justify it, there must be very grave cause indeed, and the best proof of our sense of such gravity would be our willingness to make serious sacrifices in support of our opinion."

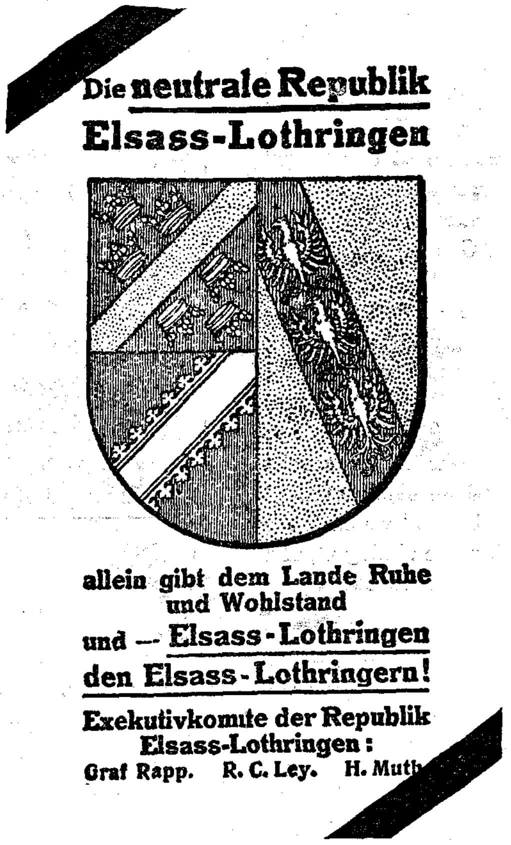
But *The Guardian* avers that England was not willing to make such sacrifices, and, in truth, was hardly willing to make any sacrifices at all. So long as there seemed a fair chance this "qualified and irresponsible form of intervention might succeed," England went on with it, but now that it is plain that—

"If it is to succeed, very much larger sacrifices will be needed, we decide to cry off and stop the leak. It is a right decision, but it is to be wished that it had been reached on very different grounds. The decision has come none too soon. The whole position in Europe is full of peril, and the problem to which the Great Powers should direct their thoughts and efforts is of a different and more deadly kind. While we are still blockading Russia and partially blockading Germany—crime heaped on crime—the specter of famine already stalks through those desolated lands. It is possible, it is even likely, that within the next few months, and long before the next harvest can be reaped, millions of people may die and that the toll of the days of peace may be greater than the toll of war. Mr. Hoover is an experienced and highly capable man, and he has estimated that the food available in Europe is wholly insufficient to feed the European population, and that vast numbers must emigrate or perish. Here is a new war before us indeed; it is the war against famine. What has the Paris Conference to say, what will the new assembly of the Powers which it is proposed to set up have to say to this new enemy? What remedy or preventive besides blockade?"

GERMAN PLOTS IN ALSACE-LORRAINE

GERMAN PROPAGANDA IN ALSACE-LORRAINE in many and countless guises has been set under way at a season most favorable to Teuton scheming. For it is admitted by temperate French observers that readjustment takes time in the reunion of two groups of human beings who have been politically separated for nearly half a century. In that period many changes have occurred among the French in France as among the French in Alsace-Lorraine. In the first chilling moments of waking from the dream to the reality of being rejoined to France, many Alsatians and Lorrainers found things much different from what they expected, we are told. The German plan is to take advantage of these transitional moods to keep Alsace-Lorraine in a state of upset and at the same time to impress upon the outside world that the "lost provinces" are really lost only now, because they are lost to Germany. Thus we hear of an American newspaper correspondent who received a letter from a certain stripe of "Alsace-American," explaining that the writer had "lived long in the United States and understood American misapprehension of things relating to Alsace-Lorraine." To be sure, when the French arrived there was "a moment of foolish enthusiasm," but this has passed, says the letter, and the mass of the people crave the return of German rule. The Paris *Matin* exposes a campaign for the establishment of the Neutral Republic of Alsace-Lorraine, which, according to the pronunciamentoes of the executive committee of this nebular republic, alone "can assure tranquillity and well-being in the country both to Alsace-Lorraine and to its people." The committee informs the Alsace-Lorrainers further that "no power can be stronger than yours if, united, you proclaim your right of self-determination, which was guaranteed by the Entente." And the question is asked, "What is being done for this right of self-determination?" Members of the "Neutral Republic" committee were arrested at Strasbourg at the very moment they were sending out pamphlets that had come straight from Germany. A special appeal was made to French soldiers in these pamphlets not to interfere in case there should be an uprising in the interest of the "Neutral Republic." In Lorraine Germany's underground operators, according to *Le Matin*, are responsible for many labor troubles; and all these anti-French activities were most feverish in the days preceding the recent French elections. The purpose was to divert the people from taking part in the elections in the hope of turning their mind either toward Germany or toward the "Neutral Republic." Meanwhile it is recalled by French writers that whereas the first Alsace-Lorraine representatives who went to Berlin after the Franco-Prussian War did so chiefly to protest, the twenty-four deputies from Alsace-Lorraine in the French Chamber come to the Palais Bourbon gladly and have as their leader a deputy who was born since 1870. French Socialist papers are most critical of France in Alsace-Lorraine, and a specimen of their fault-finding appears in the official Socialist organ, the Paris *L'Humanité*, which says:

> "Official and *bourgeois* France has gained no prestige in Alsace since the armistice. Rather, in the course of months it has given rise to deep and general discontent on the part of the working-class and of the workers in the regained province. They complain, as do we all, of the state of siege and of an almost total suppression of freedom."



Die neutrale Republik
Elsass-Lothringen

allein gibt dem Lande Ruhe
und Wohlstand
und — Elsass-Lothringen
den Elsass-Lothringern!

Exekutivkomite der Republik
Elsass-Lothringen:
Graf Rapp. R. C. Ley. H. Mut

From the Paris "Matin."

FOR A GERMAN NEUTRAL REPUBLIC.

Coat of arms published by the "Executive Committee of the Alsace-Lorraine Republic."

In that country of traditional republicanism there has been a real hate of brutal Prussian militarism, *L'Humanité* goes on to say, and the people do not like any better the insupportable restrictive conditions under which they live to-day. Now it is pointed out by the conservative Paris *Journal des Débats* that two governmental tendencies are to be noted in the question of Alsace-Lorraine. There is the Socialist way of thinking, with its "mania of despotic uniformity and state centralization"; and there is the other way by which it is sought to find a bridge in the transitional stage so that certain customs or local statutes are not too bruskly altered. This journal proceeds:

> "The object of the latter school is to be conscious of a mental outlook that is not always the same as ours; and, in a word, to see that the return to France, so ardently wished for by the entire population, shall not be the occasion of moral and material disorder and disturbance. It is too easily forgotten that between the earlier war and this year 1919 almost a half century has passed. In that time life has not remained stationary either on this side or on the other side of the Vosges Mountains. When the members of a family have been obliged to remain away from the family homestead for many years, their joy in returning does not prevent them from having certain feelings of disappointment at finding things so different; nor does it do away with the necessity for reciprocal precaution during the period of reunion. It is a good thing to remember often that we are now going through this stage of reunion with the Alsatians and the Lorrainers."

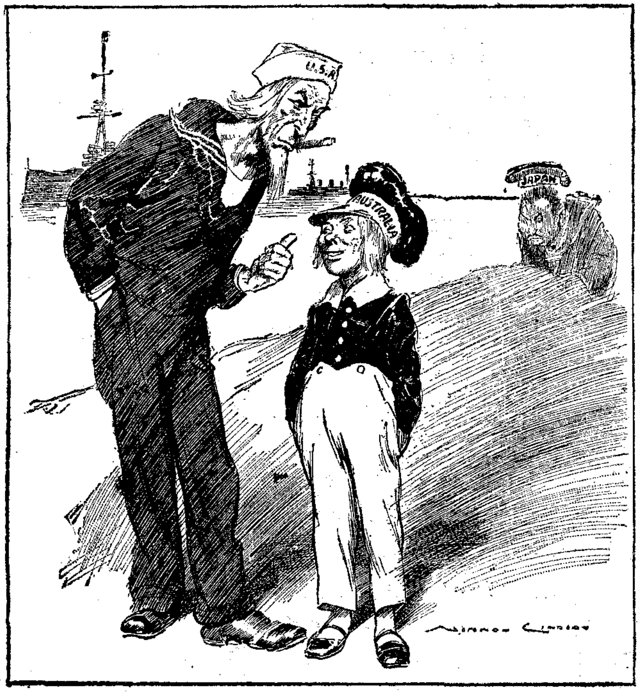
Moreover, in the unhappy existence of past years under a brutal tyranny, it is noted they have developed a very high degree of individual energy and initiative force. Thus it happens that their organization does not quite fit in. The point is, to ascertain which system should be considered the better. We are reminded, then, of Mr. Viviani's remark in his speech on the Peace Treaty that in a great many cases it will be wiser for France to take lessons from her fellow citizens of the east than to seek to give lessons to them, and the *Journal des Débats* concludes: "This alone should be sufficient a suggestion to us for prudence."

To beguile the people of this conquered territory, the Paris *Action Française* recalls, their masters gave them administrative order and material prosperity, and it adds:

> "When our troops routed the invaders and usurpers they raised at Metz and at Strasbourg the flag of independence and national fraternity. Now appears the new difficulty that these French people restored to France may suffer from defects in the economy of democracy and inefficient administration of the Republic. Will it be possible to substitute for our bureaucratic and formalistic rigidity of method the liberty of a province promised to them in turn by Joffre and Clemenceau?"

JAPAN PLANNING A BIGGER NAVY

IT MAY SEEM STRANGE TO FOREIGNERS that Japan, a member of the League of Nations, should have a new naval-building scheme under way in view of the fact that the Covenant has been signed recognizing the necessity of a reduction of armaments. This admission is frankly made by the Tokyo *Jiji*, a progovernment organ, which assures the world that Japan's present naval program is not new, but dates back to a time shortly after the termination of the Russo-Japanese War. Then the scheme known as the "eight-and-eight fleet" (eight battle-ships and eight battle-cruisers) was recognized both by specialists and the nation as the minimum limit of Japan's naval equipment, and "if it had not been for political or financial obstacles the plan would have been completely carried into execution several years ago." This being so, the *Jiji* believes that Japan may even now alter her naval plans for an eight-and-six fleet, which is actually in process of making, into an eight-and-eight fleet, without arousing suspicion or surprize in other Powers, as it is the lowest armament "consistent with national safety, having special regard to the geographical situation and circumstances of this country." Japanese naval expansion, the Kobe *Japan Chronicle* reminds us, is always officially styled "naval replenishment," and in the bill which is to be one of the most important problems before the Imperial Diet, the plan proposed by naval authorities consists in building 215 vessels, including 4 battle-ships, 4 battle-cruisers, 20 cruisers, 82 torpedo-destroyers, 75 submarines, and 30 special service vessels. These are to be built in eight years (1920–1927) at a cost of 764,000,000 yen over and above the cost of the ships now under construction. Altho some reduction will be made before the plan is submitted to the Diet, it is reported that an agreement of views has been arrived at between the military and naval authorities, despite their perennial rivalry for expansion and budget appropriations.



AN UNAPPRECIATED FRIENDSHIP.

"U. S. A. is sending its Pacific fleet on a friendly visit to Australia."
—*Press dispatch.*

THE VISITOR—"What's ailing that guy, son?"
SON—"You and me, Uncle." —*The Bulletin* (Sydney).

The *Jiji* gives these reasons for a bigger navy:

> "In discussing the question of national defense, it has been usual to make calculations with some imaginary enemy in view. But now there are new factors which must have due weight in considering the question of naval armaments. (1) Having undertaken a mandatary administration of the South Sea Islands, Japan has extensive areas north of the equator to keep guard over; and (2) now that the Japanese mercantile marine has developed so much that there is hardly any sea on which the flags of her merchant vessels are not in evidence, it is necessary to give adequate protection not only to those vessels, but also to the increased number of her nationals resident abroad as a result of the great expansion of her carrying trade. Here is good material for showing that the naval-supplement scheme of Japan can not lay her open to a charge of militarism or aggression."

The Japan Chronicle says such arguments are "unconscious quotation," for they are "identical with those used for the creation of the German Navy." Less confident in the prospect is the Tokyo *Yorodzu*, an opposition paper, which recalls that in the last session of the Diet the policy of the naval authorities was to have sixteen battle-ships and eight battle-cruisers:

> "This meant an addition of a squadron of eight battle-ships to the eight-and-eight fleet which had been the aim pursued by the Navy so far. The scheme which is actually in progress is an eight-and-six fleet (including eight battle-ships and six battle-cruisers to be completed by the end of 1923), and for this purpose an appropriation of 480,000,000 yen to be spent in the course of 1920–1923 has already been approved by the Diet. It is said that a further sum of over 500,000,000 yen will be required for carrying out the proposed scheme for completing an eight-and-eight fleet in eight years from next fiscal year. This is a serious financial problem. But apart from the question of ways and means, there are two or three previous questions to be answered in connection with the scheme."

One of these questions is the restriction of armaments, the *Yorodzu* points out, and another is the ship-building capacity of Japan. But more important than either is the question of the type of vessels that are to be built, especially of the value of battle-cruisers, and this journal proceeds:

> "Battle-cruisers are a sort of cross between battle-ships and torpedo-destroyers. They are no match for battle-ships in point of offensive and defensive power, and they are not up to torpedo-destroyers or light cruisers in point of speed. This weakness of battle-cruisers was exposed by the naval fight between Britain and Germany, and some people have already begun to doubt their utility. In order that Japan may complete the eight-and-six fleet by the end of 1923, as arranged, it will be necessary to build two more battle-cruisers; and if the eight-and-eight fleet scheme is to be carried out, it will be necessary to build four more. Since doubts are cast on the usefulness of this class of vessel, will it not be politic to remodel the scheme altogether on the basis of further technical investigations? This is not a matter to be lightly dismissed if one consider that it costs the large sum of 45,000,000 yen to build a battle-cruiser of 30,000 tons."

In the *Kokusai-ho Gwaiko Zasshi* ("Review of International Law and Diplomacy") Vice-Admiral Sakamoto writes that—

> "Altho it is true that one can not expect much from the League of Nations, yet this much can be hoped of it, that the standards of armaments of the several Powers will be fixt within such limits as they may agree to, and within such limits it will be possible to minimize the burden of armaments, if opportunity for armaments should be equalized, by limiting arms and, consequently, the cost of armaments by requiring, for instance, that the displacement of battle-ships should not exceed 20,000 tons, that the caliber of guns should be twelve inches at most, and so on."

Incidentally this Japanese Vice-Admiral points out how steadily the naval expenditure of his country has been increasing as follows:

> "The ratio of the annual average of naval expenditure for the ten years preceding 1918 to the total national expenditure was 14.8 per cent., but it bounded up to 18.2 per cent. in 1918, and there was another advance to 23.6 per cent. in 1919. There is no doubt that there will be a further increase in 1920 and the succeeding years. Such a high ratio has seldom been witnessed in the navies of other Powers. Even the naval appropriations of Britain in 1914, when her Navy was in a state of greatest tension, represented no more than 24.6 per cent. of the total expenditure. And it is to be feared that this abnormal ratio attained to by the British naval budget in time of war will soon be reached in this country in time of peace, considering the rate at which the naval appropriations have increased here during the past ten years or so."

ANOTHER LITTLE CHILD HAS SHRIVELED UP AND DIED

THE mother, creeping back, gaunt and cold, from the desert, has put down the thin little bones with those that strew the road, so—many—miles, and has sunk down beside them, never to rise again.

Only a little child, and a mother, out there on the bleak Armenian road—but what is that **Vision** hovering there—and what is that **Voice** the cold winds bear to the ears of our souls—**"I was hungry, and ye gave me no meat—I was naked, and ye clothed me not."**

To-day—yes, to-day, while we are enjoying our CHRIST-mas gifts—many more of these little children—not a hundred, nor a thousand, but two hundred and fifty thousand of them—are still wandering uncared for and alone in that dead land, " their weazened skins clinging in fear to their rattling bones," and they are crying out with gasping breath, " I am hungry!—I am hungry!—I am hungry!" And the Voice of One who watches us as we rejoice in our gifts to celebrate His birthday, comes again to the ears of our souls—**"I am hungry!—I am hungry!—I am hungry!"**

Now the children, and the mothers, in Armenia are dreading the winter. " Just human remnants, they are not protected, many of them, from the elements by even the dignity of rags. The most favored have merely shredded rags." How shall we sing our Christmas songs—and laugh—and light the candles—and give beautiful gifts—while that pleading Voice cries in the ears of our souls—**"I am naked—and cold—naked—and cold."**

BUT WE CAN feed and clothe these perishing ones—some of them—before it is too late. Word is cabled from the Caucasus: " It is impossible that the loss of 200,000 lives can at this day be prevented, but the remaining 500,000 can possibly be saved." They need not starve, and freeze, and die if we will save them. But oh, hurry, hurry! " The Armenians are dying so fast from starvation and disease that the grave-diggers fall exhausted at their work." In the name of Him who saw the multitude " as sheep not having a shepherd, and was moved with compassion toward them," and exclaimed to His disciples who would turn them away, " they need not depart; give ye them to eat!" open now *your* heart and purse to *th*ese suffering ones. **They need not die! Give YE them to eat!**

He fed five thousand hungry people in the wilderness—and said to His followers: " The things that I do shall ye do also, and greater things than these shall ye do." To-day nearly eight hundred thousand destitute Armenians—His people—need food and clothing.

He took little children in His arms and blessed them. To-day will **you** take these sad, cold, hungry little children of Armenia into YOUR arms and heart, in His name, and give them food, and warmth, and life?

What a joyful Christmas it will be when, with your songs and your laughter, you hear a Voice of wondrous sweetness speaking to you, " O ye blessed of my Father, I was hungry and ye gave ME meat. I was naked and ye clothed ME. Inasmuch as ye have done it to these My brethren, ye have done it to ME."

Our own inquiries have convinced us of the desperate and immediate urgency of this need. It can not be overstated. Not a day must be lost. We have satisfied ourselves, also, that every dollar of these funds will go without delay to the relief work for which it is given, that it will be wisely and lovingly administered and that not one cent of it will be deducted for organization expenses. It is impossible to refuse, therefore, the utmost help, and although we have twice before given largely, we are now again subscribing five thousand dollars in this Christmas drive. We are very sure that the sympathetic hearts of the more than two millions of *Literary Digest* readers will not be satisfied until many thousands of generous checks are mailed to the Treasurer of the Near East Relief. Send **your** contribution quickly and find your sweetest Christmas joy in giving life, and food, and shelter to these suffering ones whose only hope for these things is now centered in *you*. Send your check to CLEVELAND H. DODGE, Treasurer, Metropolitan Building, Madison Avenue and 23d Street, New York City.

SCIENCE AND INVENTION

EFFECT OF PROHIBITION ON THE HOSPITALS

FEWER "DRUNKS" IN THE HOSPITALS; less public drunkenness; fewer injuries from brawls; fewer "family relief" cases applying at clinics for advice and consultation. In a nutshell, this appears to be the result of nation-wide prohibition, as the hospital authorities see it. Reports from institutions throughout the country, as obtained by a staff investigator of *Hospital Management* (Chicago, November), show this very clearly. In addition, we are told that the demand for a separate institution to deal with alcoholic cases has ceased to be heard and that the labor situation in hospitals has greatly improved. "We have few changes on our pay-roll," one hospital reports, "and as a whole, a more self-respecting atmosphere." It is even suggested that, as alcohol is a factor in turning latent into active tuberculosis, prohibition may diminish the number of tuberculosis cases in hospitals. Says the paper named above:

"Hospital people naturally are asking themselves, 'How will prohibition affect our work? Is it going to decrease the number of charity cases? Will it make necessary a change in the character of the appeal and the service that the hospitals must provide in order to continue to get the support of the public? Will it change conditions as to employees?'

"Some of these questions have been put before hospital executives in various parts of the country, handling various types of cases. Their answers, while in no case conclusive, are at least significant, and will be read with interest by those who are studying this subject."

Some particularly interesting information was obtained from Cook County Hospital, of Chicago, one of the largest general hospitals in the world, with a capacity of 2,700 beds, and a daily average of 1,850 patients. Dr. Carl Meyer, assistant warden of the institution, said:

"Since prohibition went into effect there has been a marked decrease in our hospital population. We are running about five hundred less than usual, our average at present being around 1,300. We are getting very few accident cases, the former record of twenty-five to fifty on Saturday nights having been reduced to one or two. Alcoholics have been almost eliminated, and accidents due to this condition, as well as medical cases growing out of exposure, have been practically *nil*. In fact, the 'typical bum' who used to make up a large percentage of the hospital is rapidly becoming obsolete. High wages, of course, may have had something to do with this.

"By reason of the fact that we are now handling fewer patients than at any other time since 1909, our needs are changing. We were formerly overcrowded, but with the reduced number of cases coming to us for attention it looks as tho our present facilities, as far as general hospital work is concerned, will be sufficient for eight or ten years to come. Branch hospitals were formerly being considered, and these now may be unnecessary. We need a children's hospital, and other special facilities, but as far as our general work is concerned we are in an excellent position, and will be able to take care of the needs of an increasing population for another decade."

Dr. Arthur B. Ancker, superintendent of the St. Paul City and County Hospital, an eight-hundred-bed municipal institution, said:

"It is of record here that there has been a very marked decrease in the number of acute alcoholics, as well as in the number of patients suffering from other conditions due to alcoholism, since July 1 of this year.

"There is no doubt in our minds that in the not distant future all hospitals, especially those supported at public expense, will share our experience in that direction. Many of the emergency cases that we are called upon to care for—indeed, many of those that can not be so classed, have diseases or injuries the causes of which are directly or indirectly traceable to the use of alcohol."

Dr. Charles A. Drew, superintendent of the City Hospital, Worcester, Mass., says:

"There has been a very great reduction in the number of alcoholics admitted, and there have also been fewer admissions to our public wards since prohibition went into effect.

"It is very difficult to compare the past year with the preceding year, because in September, October, and November of last year, we were crowded with cases of influenza, so that I can only give you an impression without quoting exact figures. Our income, however, for the month of October, 1919, was about 30 per cent. higher than the average monthly income for several preceding years, and this in spite of the fact that our daily average number of patients was below the monthly average of several former years.

"We do occasionally get an alcoholic who has been drinking Jamaica ginger and perhaps some of the 'straight stuff.'

"The effect on our hospital has been more marked in regard to male employees. Prior to the coming of prohibition it was a common thing to discharge a man to-day for intoxication and hire him again day after to-morrow with an increase in salary. For the past four months we have had almost no trouble with the male help because of intoxication, and the number of alcoholics admitted has been not over 10 per cent. of the average prior to the coming of prohibition.

"It is my opinion that many people who formerly came to the hospital have means to pay for a physician and nurses at home, and many people who in past years have not been able to pay the hospital will now be able to pay in part for board and care."

A particularly interesting angle on the situation is given by Dr. Irwin H. Neff, superintendent of the Norfolk State Hospital, Norfolk, Mass., who writes:

"This hospital is caring exclusively for alcoholic and drug cases; having a State-wide sociological department devoted to these purposes, it is particularly sensitive to conditions resulting from national prohibition.

"In the Legislative Report of February, 1919, of the special commission, relative to the control, custody, and treatment of defectives, criminals, and misdemeanants, the following statement was made:

"'The problem of the inebriate and the user of drugs is in a transition stage. Whether prohibition will reduce the alcoholic to numbers so small as to remove the need of public recognition and treatment, or whether the prohibition of alcohol will multiply the drug-user, who already constitutes a difficult class, even tho drugs are strictly prohibited, are questions that can not be answered in advance. Those who use stimulants because of the habit overtaking them, may be expected to become fewer, while the neurotic individual whose disorder drives him to the use of narcotics or alcohol can not be expected to change his bent by operation of law. The intensive narcotic problem is likely, therefore, to remain.'

"This deliberation of the Commission should reflect the opinion of those interested and having a knowledge of the inebriate problem."

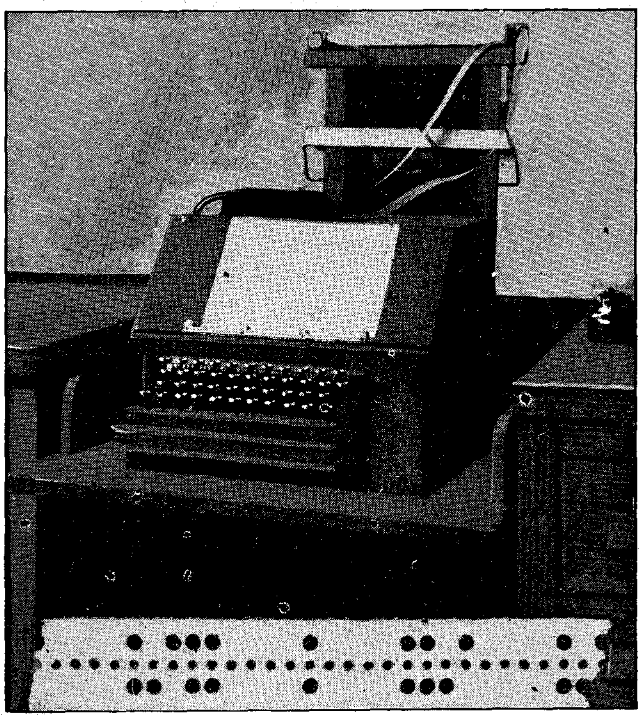
The moral side of the question is suggested in the following comment by Sister M. Genevieve, of St. Elizabeth's Hospital, Youngstown, Ohio, who wrote:

"The hospitals are in a fairly good position to observe the effects of the operation of the dry law. The number of the old type of alcoholic patients received into the hospital is 90 per cent. less. However, they are being replaced by a more pitiable class—small, thank God! We are called upon to treat victims of various poisonous brews. Some of these have been hurried to their ruin by a reckless determination to beat the law.

"We have a God-given free will. Virtue is a habit acquired by the exercise of that will in repeated selection of the right. Temperance is a virtue; man can not be constrained to practise it by laws that simply take his bottle. He must will to smash it himself."

SENDING WIRELESS BY MACHINE

WIRELESS IS NOW RAPIDLY ENCROACHING on the field of the submarine telegraph cables, which for a long time held the palm for speed, accuracy, and dependability of communication between continents. The so-called "static" interference has now been practically eliminated as a cause of trouble, and one of the remaining problems, that of high-speed transmission, has just been solved, as we learn from *Popular Mechanics* (Chicago, December). Says Samuel W. Beach in that magazine:



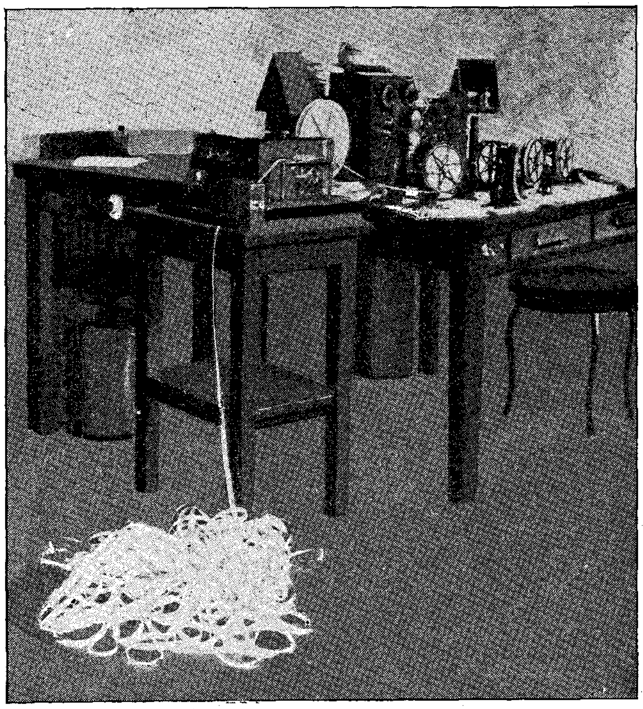
THE MACHINE THAT SENDS WIRELESS.
By perforating the transmitting-tape, seen below it.

> "With the apparatus shown in the accompanying pictures, which is now in constant use in radio communication between the United States and Europe, the problem seems to have found a practical solution. The dots and dashes it carves out are perfect, which means a lot to the busy receiving-operator across the water. If, however, the latter fails to read any of the signals, he has but to step across to his 'sending' station with a rush message, which is transmitted instantly, and the office thus notified stops its machine, backs it up to the point indicated, and starts it going again.
>
> "Anybody who can peck at a typewriter can keep two or three sending-stations working. The messages to be sent are punched into a tape exactly as one manipulates a typewriter, excepting, of course, that the letters appear on the tape as a series of holes. The sending-machine is so arranged that, as the tape unwinds, it sends out dots and dashes over the radio in conformity with the perforations. This is accomplished by passing the tape between upper and lower contact points which, when coming together, cause an action analogous to the closing of an ordinary telegraph-key, the upper perforations starting the signal and the lower ending it. Thus, in the letter 'A,' which is composed of a dot and a dash, the first lower hole is almost directly below the first upper hole, so that, as the tape moves along, the upper contact will no sooner 'close' the radio circuit than the lower comes along and stops it, and the almost instantaneous flash that has been allowed to escape is called a 'dot.' The upper contacts then come together through the next hole, and as there is quite a distance traveled by the tape before the next lower hole comes along, the flash sent out in the meantime has been of an appreciable duration, and is called a 'dash.'
>
> "There are a number of patented mechanical transmitters, varying only in the means employed to the common end. They can be speeded to any desired number of words per minute; but as a rule a steady jog of approximately thirty words per minute is maintained. However, since this speed is far below the ordinary typist's average; some machines are so arranged that while the operator manipulates the keyboard at his habitual speed, the tape moves between the contacts at a properly reduced rate."

BUSINESS AND TEMPERATURE

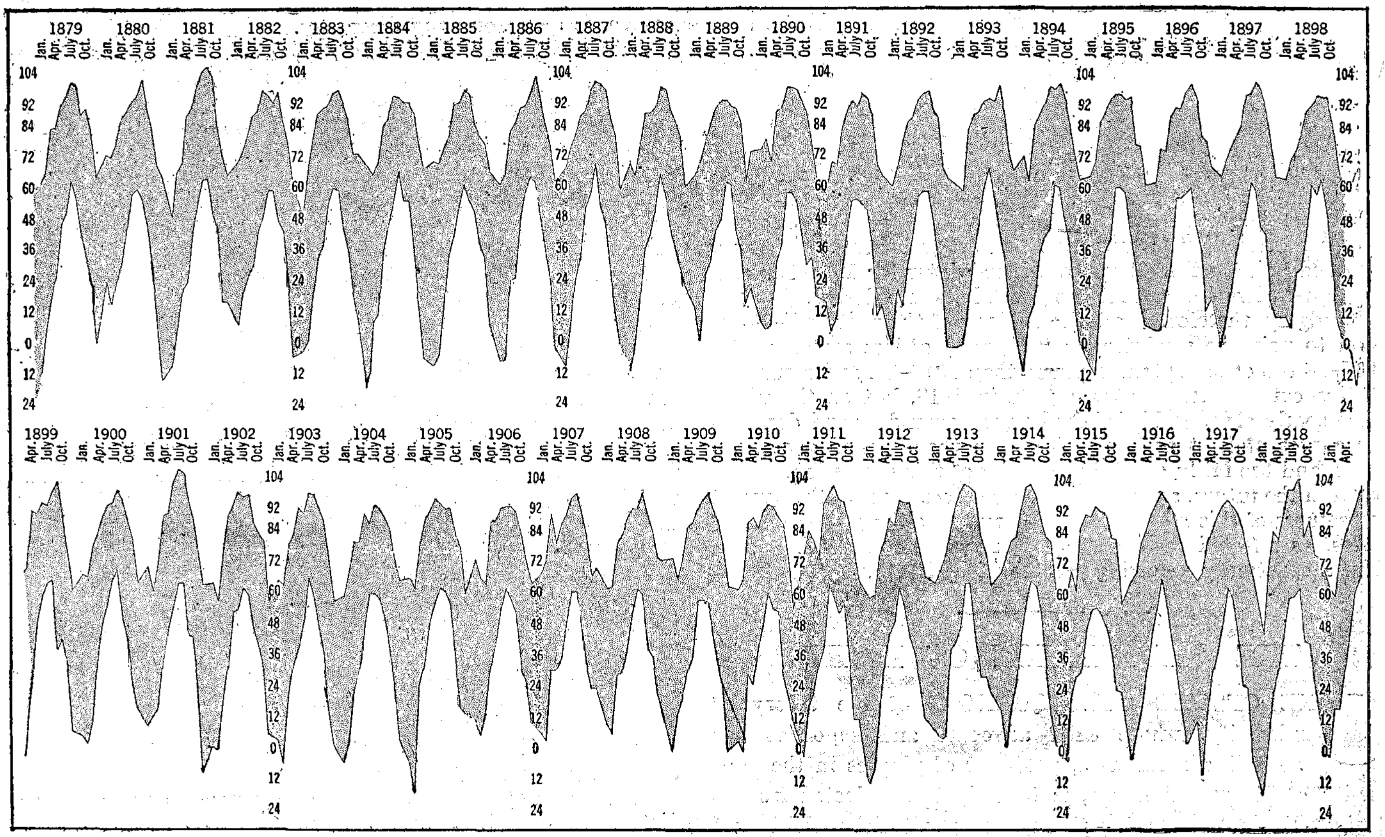
SKATES DO NOT SELL WELL when there is no ice. Electric fans are not in demand in cool and breezy weather. These are what business men call "seasonable goods," and their sale depends largely on temperature. Unless the dealer can foresee, in some degree, whether a summer or a winter is to be normal, his orders for goods of this character must be based on guesswork or on untrustworthy averages. That buying and selling of this sort, however, may now be "something more than a constantly recurring gamble with chance" is the conclusion of the Committee on Statistics and Standards of the Chamber of Commerce of the United States, whose chairman is Archer W. Douglas, vice-president of the Simmons Hardware Company, of St. Louis. The committee's report on the effect of rainfall on business has already been quoted in these columns. The present report on temperature appears in a special bulletin of the Chamber (Washington, November 7), in which we read:

> "The so-called average, or what are known as 'mean,' temperatures are worse than worthless for all business purposes, as they are thoroughly misleading. Years in which there are the most violent differences in extremes of temperatures show mean temperatures within a few degrees of each other. The real problem, therefore, is to define what is meant by a cold season or a warm season. For business purposes, this definition relates to extremes of temperatures and their duration. As will be shown later, the sale of certain seasonable articles depends largely upon what is commonly called a cold spell or a hot spell. In the Central West the demand for ice-skates, for instance, hangs principally upon low temperatures sometime between November 1 and December 25. These low temperatures may last only a few days, but within that period they are very effective in causing the sale of skates, even tho the remainder of the two months may be only moderately cold. For the purpose of this report, therefore, there have been chosen the extreme temperatures of both heat and cold as recorded at St. Louis by months from 1879 to 1918, inclusive. In order to have some



Illustrations by courtesy of "Popular Mechanics."

THE WHOLE SENDING OUTFIT,
With rolls of tape and transmitter.



UPS AND DOWNS OF THE MERCURY AT ST. LOUIS SINCE 1879.

Careful study of such a chart for his own city may aid a merchant in buying goods which depend on the weather for sales.

basis of reckoning, those winters where the temperature falls below zero are regarded as 'cold,' while summers recording temperatures above 100 degrees are classed as 'hot.' The problem then simplifies itself as to whether temperature records in the past show the same tendency to flock together, in their extremes, as was found in the precipitation records of the association of wet years with each other, and of dry years with each other."

The committee's study, we are told by Mr. Douglas, seems to establish very definitely the relation of maximum temperatures in summer with deficient rainfall. A hot month is a dry month. Summer months of high maximum temperatures are also months of high mean temperatures. In other words, a summer with temperatures above 100 degrees is generally a hot summer, and the very hot days are a part of that particular summer and not mere exceptions to otherwise pleasant weather. We read further:

"The same meteorological causes which produce extremes of heat and cold in any one season—that is, winter or summer—also cause their persistence and their recurrence in that same season. This is vital in connection with the effect of extreme weather upon business, as not being merely a chance occurrence for a few days of abnormal temperatures, but something to be reckoned with as a distinct weather factor in that particular season. . . . . . .

"The flocking together of hot summers appears to be confined to two of them at most. These are likely to be succeeded by a flock of from three to four summers of more moderate temperatures. In other words, it is fairly safe to reckon on a very hot summer being succeeded in the main by one of more moderate temperatures.

"On the other hand, the winters, after the fashion of the animals in Noah's Ark, seem to be associated after their kind. There are groups of cold winters, often three or four together, succeeded by more moderate ones, tho not so numerously associated. There does not seem to be any connection between temperature and precipitation in winter. A very cold winter may be either a wet or a dry one.

"We have then sufficient data to form the basis of a working theory in regard to the relations of business and temperature. As in the case of rainfall and business it is not, and can not be, of absolute exactness, but it has been on trial for some years, and has been found dependable and reliable about 80 per cent. of the time.

"It must be remembered, however, in the sale of seasonable goods by manufacturers and distributers, that other factors than the weather enter largely into consideration. In clothing, for instance, fashion cuts a large figure. In another line, refrigerators or ice-chests, there are several compelling causes. They increase in sales from year to year, as population increases, because they are both sanitary and economical; also because ice is plentiful and comparatively cheap on account of its being made artificially to so great an extent. Then it is much the fashion at present to give them as wedding presents. Moreover, all seasonable goods of any moment and importance are sold by manufacturers and distributers largely on 'futures'—that is, much in advance of the season in which the consumer uses them, and without any regard to what the weather may be in that season.

"Refrigerators, for instance, are largely bought by retailers from the wholesale distributers early in March and April for resale to the consumers in June, July, and August. By chance, the summer turns out to be wet and cold. Very few consumers buy any refrigerators that season. They are consequently carried over by the retailers into another summer which turns out to be hot and dry and the entire stock of refrigerators is easily disposed of. Meanwhile, however, the retailers bought none from the wholesaler because they carried over so many from the previous season. So, unless the manufacturer and the distributer keep posted on such matters, their sales are directly at variance with the weather conditions, being very good in an unfavorable season and very small in a most favorable one.

"This is one of the many instances where mere statistics may be misleading unless all the underlying facts which accompany and produce these statistics are thoroughly known and understood. It is in problems of this nature that those professional statisticians who know only figures go so completely astray and consequently draw most misleading conclusions.

"Giving due regard to such matters, it will be found, however, that in seasonable goods, in the last analysis, the weather is still the dominant factor as regards sales.

"In the application of this principle, the item of electric fans readily illustrates the theory. The records for 1918 indicated that there were three months—June, July, and August—in which maximum temperatures of 100 degrees and over were reached. A further study of the chart also indicated the likelihood that these temperatures would probably not be repeated in 1919 nor yet in 1920. So that to the extent that hot weather affected the sale of these goods, this factor would be less pronounced than in 1918.

"The same reasoning applies to the distributer in ordering corn-knives for 1919, as he would feel very sure that no such withering of the corn crop as occurred in July and August would be repeated in 1919, and to that extent his sales of these goods would not be so large. This conclusion naturally follows from the showing of the chart that a summer of extremely high temperatures is rarely followed by a like season.

"Likewise, the dealer who in the spring of 1918 gave his order for ice-skates, ice-creepers, and sleds could draw the safe conclusion (as was done in actual practise) that the four preceding winters where temperatures below zero were successively recorded pointed the way to a milder winter for 1918–19, with consequent less demand for the goods he was ordering.

"Judging, therefore, from the analogy of the past, indications seem to point to a winter (in St. Louis) of less severity than 1917–18 tho of lower temperatures than 1918–19, and a summer of less extreme temperatures than in 1918, but on the whole more nearly akin. This is based on the ascending and descending curves of heat and cold shown in the chart in successive years, and the fairly general regularity of this succession.

"If in the future, as in the past, time gives proof of the general correctness of this method, the buying and selling of seasonable goods, as affected by the weather, should be something more than a constantly recurring gamble with chance."

THE GRAVITATION OF LIGHT

ONE OF THE CONSEQUENCES of the theory of relativity, whose chief advocate and exponent has been Edwin Einstein, professor of physics in the University of Prague, Bohemia, is that light is deflected from a straight line when passing through a gravitational field, and therefore proceeds through space in a tortuous series of curves, which, tho so slightly different from a straight line as to be difficult to detect, are none the less real. Einstein's theory, of which this is only one of the consequences, has attracted much attention among scientific men since he first put it forth, fifteen years ago; but it has been widely regarded as somewhat academic and as practically impossible of experimental verification. Much interest, accordingly, is excited by press news from London that the observations of the total solar eclipse of May last, now being reduced and discust, indicate the correctness of Einstein's views and show that light is really deflected in passing an intensely gravitating body such as the sun. Professor Currier, of Brown University, is quoted in the New York *Times* as pointing out that, according to Newton's theory, gravitation would not affect the direction of a ray of light. With the development of the electromagnetic theory of light, however, it has been asserted that gravitation would bend a ray of light as if it were a material projectile moving at the same rate. He goes on:

> "According to Einstein, a ray of light is deflected by gravitation, the amount of deflection being twice that predicated by the electromagnetic theory. The only way yet devised to test these theories is by means of stars near the sun at the time of a total eclipse of the sun. At such a time, a ray of light from a distant star passing close to the sun would be bent, according to these theories, causing the star to appear displaced from the position it normally occupied."

This apparent displacement, according to recent dispatches from London, was observed by the scientists last May. Harold Jacoby, Rutherfurd Professor of Astronomy at Columbia University, explains the new discovery in an interview printed by the New York *Tribune*, as follows:

> "It has always been accepted that light travels in a straight line. In addition to the deflection of light-rays, due to the gravitational attraction of the sun, there would exist under Einstein's theory a slight curvature in the ordinary path of light hitherto supposed straight. Verification of this theory will rank as one of the leading scientific discoveries of all time.
>
> "The methods we possess for estimating the distance of the stars from the earth are based on the idea that light travels in perfectly straight lines. If there are curves in these lines our observations will have to be recalculated, and may show the stars to be farther away than we have supposed. This, of course, is an astounding discovery. The scientific importance of it is clear, since the few measured stellar distances that we possess give us our only knowledge as to the actual size of the stellar universe.
>
> "This might mean that there is a limit not to space itself but to the distance our telescopes can penetrate. The telescope is the astronomer's eye. If, when he looks into space with that eye, he is not looking along a straight line, but along a curve like a circle, what would he see? The circle would be tremendously large. Its curvature would be like the curvature of a railroad track which goes around a bend so gently as to seem like a straight track. But if the telescope could be made with almost infinite space-penetrating power the astronomer might conceivably look completely around the circle and see the back of his own head as he sits with an eye at the tube. Whereas, if he were looking in a straight line, he would look farther and farther into space, as successive generations improve the power of optical instruments.
>
> "Einstein's theories were published about fifteen years ago. There has been a mystery surrounding gravitation since Newton. The law of gravitation reached us in the form that he left it, which was that every particle of matter attracts or pulls every other particle of matter. No one has ever been able to explain how one particle can attract another particle, from which it may be separated by a million miles. How is that pull transmitted through space? And how does it happen that it can be transmitted instantaneously?
>
> "The law itself has enabled us to explain orbital motions of heavenly bodies in the solar system, and, what is of more practical importance, to predict these motions for the future so that they can be printed in advance in the Nautical Almanac for the use of navigators and surveyors.
>
> "The observations as a result of Einstein's astounding predictions were made on the occasion of a total eclipse of the sun when the interposed moon cut off the solar light and left the sky darkened, even tho the eclipse occurred at midday. The sky is not made as dark as at midnight, but is dark enough to photograph the brighter stars. It is because the processes of photography have now reached a high state of perfection that we have been able to make necessary photographs which could not be made at former total eclipses. You must understand that these stars are out in space beyond the eclipsed sun. Imagine that there was an exact circle of stars surrounding the sun. Of course, there is no such thing as a circle, but the stars actually existing can be considered as approximately such a circle.
>
> "During the short period of the eclipse a number of photographs of the star circle was made. Some months later, when the changing seasons brought these stars above the horizon at night, instead of in the daytime, the circle was photographed again. The night photographs show the circle a little smaller than the day photographs. This is exactly what was predicted by Einstein. The only possible cause that could have made the circle larger is the following: The sun must do something to the rays of light as they pass close to its surface on their way to the earth. In other words, the sun must bend the rays of light. When the night photograph was made by the observers the sun was not there and the rays came straight through.
>
> "So it follows that the light, as it passes close to the sun, is pulled by the sun just as if the light were a stream of particles of matter which would be affected by the sun's ordinary Newtonian gravitation. Now, according to the theories of light hitherto maintained, there is no gravitational pull upon it. It has no material qualities which would bring it under Newton's law. But as a result of the recent observations, it is clear that both the gravitational theory and the light theory are interconnected. The practical importance of the bending of the light rays is small, but it means much to the scientific world. It is something absolutely new."

A prominent physicist, not named, is quoted in *The Times* (New York) as saying that he would not regard the discovery, interesting as it is, of such importance as to revolutionize the accepted fundamentals of physics. Another said that he did not doubt the correctness of the observations, but that he would not be willing to accept the conclusions until it had been more definitely shown that the bending of light from stars passing close to the sun on its way to the earth was not due to the refraction of light gases surrounding the sun. Prof. John M. Poor, of Dartmouth, is quoted as making the following comment:

> "If, as reported in the daily papers, Einstein's theory has received confirmation as a result of observations of photographs made at the time of the recent eclipse, it represents

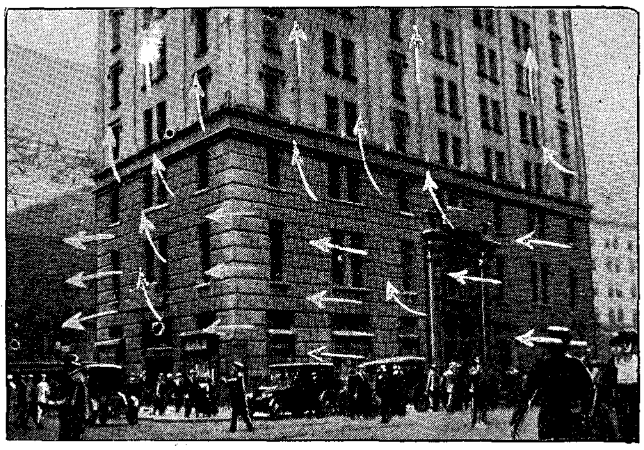
another approximation to the ultimate truth which the scientist is continually seeking. The Newtonian mechanics will need modification. That will be a matter which for the present, at least, will concern the student in mathematics and pure science. But what the ultimate effect will be on practical life can not now be foretold."

In an interview printed in *The Times*, Dr. Einstein gives the following reasons for calling his theory the "Theory of Relativity." He says:

"The term relativity refers to time and space. According to Galileo and Newton, time and space were absolute entities, and the moving systems of the universe were dependent on this absolute time and space. On this conception was built the science of mechanics. The resulting formulas sufficed for all motions of a slow nature; it was found, however, that they would not conform to the rapid motions apparent in electrodynamics.

"This led the Dutch professor, Lorenz, and myself to develop the theory of special relativity. Briefly, it discards absolute time and space and makes them in every instance relative to moving systems. By this theory all phenomena in electrodynamics, as well as mechanics, hitherto irreducible by the old formulas—and there are multitudes — were satisfactorily explained.

"Till now it was believed that time and space existed by themselves, even if there was nothing else—no sun, no earth, no stars; while now we know that time and space are not the vessel for the universe, but could not exist at all if there were no contents—namely, no sun, earth, and other celestial bodies."



By courtesy of "The Popular Science Monthly."

BEWARE A FLATIRON CORNER ON A GUSTY DAY.

OUR WINDY SKY-SCRAPERS

IN CLASSIC MYTHOLOGY the winds abode in a cave, whence they rushed forth to buffet and confuse mankind. In the modern city they appear to live around the sky-scraper and in the depths of the "cañons" of high-built streets, where they make it decidedly unpleasant for the wayfarer, especially for the ones with skirts. In *The Popular Science Monthly* (New York, December), some of the sky-scrapers' windy tricks are explained in accordance with tests of air-currents made recently by a representative of the United States Weather Bureau in New York. Every one, says the writer, has had a hat blown off by some flurry of wind in the streets swooping down at an unexpected angle. Corners, and particularly tall buildings, develop miniature air-rapids, typhoons, tornadoes, chinook winds, and other air-phenomena well worth observation. He goes on:

"When the wind rushing up two streets converges at a corner the air-currents are suddenly comprest and their velocity is greatly increased. The wind may be said to split on the corner of the building in its path, but the pressure is not exerted, as one would suppose, against the corner of the wall, but at a point several feet in front of it. There is a comparatively dead space just before the corner where a sheet of paper may fall to the ground. A secondary air-current is sometimes set up in the opposite direction. Watch the movement of leaves or pieces of paper about such corners and see for yourself.

"The very deep and narrow cañons formed by the sky-scrapers in our modern cities develop remarkable air-phenomena. Let several air-currents converge in one of our modern streets and the velocity often becomes dangerous. To understand these miniature wind-storms, it should be borne in mind that converging winds tend to develop a steady stream of air which increases in velocity, while diverging currents are soon cut into so-called 'driven eddies' which dispel the force. When two or more air-currents join, the wind tends to run to a peak and the greatest pressure is exerted at its apex.

"Some interesting tests of the force of these accelerated air-currents have been made by Mr. James N. Scarr, the district forecaster of the Weather Bureau in New York. It has been found that the highest velocity of any wind sweeping over New York in past years has been ninety-six miles an hour. This observation was made at the Weather Bureau station, which is situated 454 feet above the level of the streets. A wind of half this velocity, however, is considered high, and, when drawn down into the narrow streets between the continuous rows of sky-scrapers, its velocity is often greatly accelerated.

"A casual observer is often surprized at the force with which an air-current of low velocity will suddenly leap up the side of a high building. On a comparatively quiet day such a current in the vicinity of a high building will often carry a hat or a sheet of newspaper straight upward to a height of several stories. The scientific explanation is very simple. The barometric pressure is somewhat less at the top of the building than at its foot. Now, when a current of air strikes the smooth side of a high building it naturally seeks to escape along the line of least resistance. The decreasing air-pressure tends to draw the air upward, and as it moves its velocity rapidly increases. Again, the wall of a high building will often develop strong air-currents on otherwise perfectly quiet days. When the sun beats on a building perhaps 300 or 400 feet in height, a considerable amount of heat is stored up. The air in this heated area naturally has a tendency to rise. It has been found that a current of rising air tends to increase in temperature. To be exact, it rises one degree in going up 183 feet. If the building is 400 feet or more in height it may thus gain several degrees in its upward progress. Moreover, the decreasing air-pressure still further accelerates this movement.

"This phenomenon is common in many mountain regions, where the heat accumulates against high precipitous walls of rock. In the Rocky Mountains the air-currents thus developed are called the chinook winds and on the Italian slopes of the Alps the foehn winds. The chinook winds or currents developed in our modern cities naturally rise but a few degrees above the normal temperature, but this is often sufficient to create a strong upward draft in our streets. On reaching the roofs of the high buildings they tend to slip over the top and descend into the next street.

"The tendency of the air to spill around the sides of high buildings serves to develop many interesting air-phenomena.

"The direction of a current is influenced by the angle at which it strikes against a vertical surface. If the wind is prevented from flowing upward it will bound off the side of a building at an unexpected angle. When the wind blows steadily against such a surface the force of the impact is increased and the wind, in escaping, gains new force. If the air-current escapes down some side-street its speed is likely to be far greater than that of the original current. It often happens that the force of this current will be felt a block away when the air is comparatively quiet. This phenomenon explains the dangerous air-currents which prevail at many windy corners.

"A corner at the side of a public park or other open space often becomes a menace to life and limb for this reason. Several air-currents are piled up in this corner which have gained velocity in crossing an open space. The streets at the intersection are their only avenue of escape, and in converging to pass through these funnel-like apertures their velocity is immensely accelerated. In the midst of this turmoil dead pockets will be formed where an observer may stand in safety to watch the discomfiture of other pedestrians."

DEPARTMENT OF SCIENCE AND INVENTION CONTINUED ON PAGE 94

LETTERS - AND - ART

STATES OF MIND OVER KREISLER

TEUTON MUSIC and musicians have still their battles to fight, and the battle-field stretches from here to Australasia. The music itself is having an easier time with us than the musicians, but New South Wales stands about where we stood during the thick of the fighting. It protests against a Wagner concert in the Sydney Town Hall, and Sir Thomas Hughes in the New South Wales Legislative Council moved recently for the adjournment of the House "in order to draw attention to the matter." The Parliamentary debate, according to the Auckland *Weekly News*, was precipitated by Lady Hughes, who declared publicly that "if our Australian public are so poor-spirited as to patronize concerts of exclusively German music, played by an orchestra with the encouragement of the State Government, and if the City Council allows the Town Hall to be used for such a purpose, then truly do we insult the memory of our glorious dead and write ourselves down as a decadent people." The director of the State Conservatorium, which gave the concert, is a Belgian—"all of whose relatives," it is said, "have lived and suffered under the German heel"—and he exprest the belief that "those loyal citizens who wish to hear Wagner music should be considered as well as others." But he promised to give his Wagner mixed in the future, especially after Sir Thomas Hughes declared that "an outrage of this kind could not be cloaked by saying that the art of music was the common property of all nations."

A STORM-CENTER,

The Austrian violinist, Fritz Kreisler, whose concerts have been canceled in many places through the influence of the American Legion, while in New York "the Legion invites him to accept what amounts to a testimonial."

We have already fought along these battle-lines; our problem now is with the Teutonic musician, and the case of most delicate aggravation is that of Mr. Fritz Kreisler. His delicacy and good taste in withdrawing from the concert-field while America was fighting the Central Empires win him a large measure of esteem among those who also do not forget that he gave his services for the entertainment of our soldiers in camp. Now that he resumes his professional activities, he is meeting with expressions of sentiment plainly not dictated by New York. Here his Carnegie Hall recitals are sold out long before the date; but in the country at large he meets much unfriendly criticism, and even closed doors and darkened halls. In many cases the American Legion are the instigators of the demonstrations, tho this organization does not think unanimously. For example, the Boston *Herald* points out that "in some cities the American Legion objects to his public appearance; in New York the Legion invites him to accept what amounts to a testimonial." In Boston also "he was warmly welcomed," the *Herald* states, covering the objection to his Austrian nationality by saying:

> "It is not likely that in his native country, Austria, there is to-day any affection for Germany. To permit the violinist to play here in public hardly seems a very serious matter, even tho he may be labeled an 'enemy alien.'"

Worcester recently gave him more than a "warm welcome"; it added to his would-be applauders four hundred who were unable to crowd into the hall. History, however, records that a preliminary opposition was attempted by a small group of citizens who, according to *The Evening Gazette* (Worcester), figured much as "'The Three Tailors of Tooley Street,' who met and adopted resolutions beginning, 'We, the people of England,'" yet they profess a point of view which *The Gazette* treats sympathetically:

> "There is no arguing with those who object to Mr. Kreisler's appearance in Worcester. You can as well argue with a man who doesn't like winter. That many people are 'broad' enough already to be able to listen with pleasure to this artist, or to enjoy having him win from Worcester his golden eagles, is not to the point. Right or wrong, they are in a great minority. The minds of thousands are signally opposed to this concert. Right or wrong, to them every hand that applauds this artist seems less fitted to applaud our soldiers marching in their victory parades."

Inland cities are the ones which hold this sentiment most vehemently, and the further inland the more they put it into effect. Half-measures were resorted to in Utica, where the electric-light wires to the hall were cut "by an angry crowd of members of the American Legion and their friends, who had been driven back by the police when they tried to force an entrance into the building." Mr. Kreisler continued playing for forty minutes in the dark, say the news columns. In Grand Rapids the violinist canceled an engagement on account of a protest by the local post of the American Legion, and in Battle Creek a protest of the Ministerial Association brought the same response. In the former city a compromise was attempted in removing the concert from "the armory," where it was scheduled and holding it in another place. *The Herald* of that city refused to see "that there can be one 'American' rule for the armory and another for the rest of the city." The

Louisville case has attracted the most comment. The concert there was "indefinitely postponed" after the local post of the Legion had protested in the words of Commander McMeekin:

"I can understand how those who were not taken from the ordinary paths of life and thrown into the maelstrom of war, those whose very souls were not wrung in the ordeal, may be able to forget within a year. But we can not forget so soon. The bursting shells of Château-Thierry, the Argonne, and Champagne are too vivid in our memory. Companions who failed to come back, victims of the Prussianism for which Kreisler unsheathed sword, are held in recollection too sacred for us to remain indifferent."

The Courier-Journal finds that the matter, as it resulted, proved "a test of the Americanism of everybody. One was either for the Legion and what it represents, or for an Austrian on a tour." Louisville's response, it thinks was "good for its soul," saying:

"Undoubtedly we have needed something to jolt us back into a mood of patriotism and national feeling. With the end of battle on the field came a swift slump into a materialistic attitude toward life, toward our neighbors, toward the flag. From a high pitch of glorious nationalism came a descent into selfishness and a stolid indifference to things which counted most thirteen short months ago, into an attitude of Don't Care. Imagination and a sense of responsibility fell prey to a pursuit of dollars, idleness, or amusement.

"The flag had had its day. The reaction to other extremes got under way. The Kreisler incident has reminded us that, after all, we have a country for which stern fighting was done, which is still our country, for whose traditions and ideals we must yet stand and stand firmly.

"The opposition was not to Kreisler the artist, but to Kreisler the officer of a Hun army, which fought to entrench Prussianism in the world. It was not a crucifixion of Art, nor yet a narrow vindictive fanaticism against the foe. The sound of Hunnish guns has hardly died away. The Peace Treaty has not yet been ratified, either with Germany or Austria. Must perfectly normal, national feeling give way to an ill-timed art venture?"

The Duluth *Tribune* puts the case for the violinist:

"He is an Austrian and his native tongue is German, but he also speaks perfect English and his wife is an American.

"During our neutrality, when he had the entire legal and moral right to do so, he sent much of the proceeds from his concerts given in this country to Austria. But he did not send this money to that Government, nor to in any way help support the war, as he would have had the right to do. He sent it to support a considerable number—about thirty, as we remember—Serbian orphans, children of those who had fought against Austria and who were protégés of his wife.

"He also sent it to aid artists of all nationalities marooned in Austria. After war came to the United States, as well as before, he contributed to the Red Cross, in which his wife was a worker. He also bought Liberty bonds, and finally he gave concerts in our cantonments to our soldiers, and that without charge.

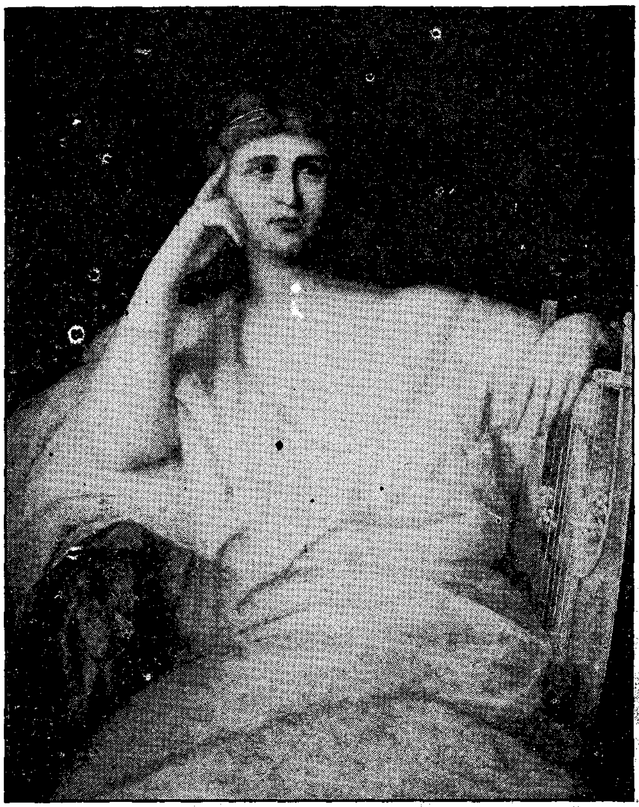
"Does it not impress all true Americans that a man whose music was American enough for our boys in khaki in the camps, whose music rested them, inspired them, comforted them, that that man's music as well as that man is good enough and his violin American enough for all the rest of us? As a matter of fact there is no foreign-born artist who deserves a more cordial welcome from us all just as Americans."

Finally, if humor can add a savor to the subject, the Norfolk *Virginian Pilot* tries to supply it:

"'Why not take advantage of the music of a vanquished foe, considering it one of the spoils of war?' asks the Paris newspaper. The question, lightly put, has been answered in a practical manner by a concert audience in the French capital which cast an almost unanimous vote in favor of readmitting German music. Sentiment is still against German opera and *Lieder*, but German instrumental music has again appeared on the programs. There is a little moral in all this for hyper-American organizations that make a show of patriotism by objecting to the performances of Fritz Kreisler. In France, which has most to fear from a recrudescence of *Kultur*, the objection has been scrapped. The New York branch of the American Legion has sensibly taken the initiative in combating this form of chauvinism by extending, through its president, a special invitation to Kreisler to play in that city under its auspices."

"WEIR"

TO BE CLAIMED by both radical and conservative would seem a curious tribute to any artist; but the writers about Weir, now that he has passed out of this world, assert that for him it is a tribute of high praise. For with the tribute goes the admiration of both. It establishes for him open-mindedness, sympathy, and eclecticism as well as achievement. He came from the school that the Modernists most abhor—Gérôme's in Paris—but he was near enough on the side of the agitating angels to be first named by them as president of the International Exhibition held in New York just before the war. He gave way to Mr. A. B. Davies, but it is not claimed that had he filled the post the picture which earned the show its cachet with the multitude—"The Nude Descending the Staircase"—would not have hung on the walls. Weir liked novelty and was an experimenter in new ways, but he was gifted with an unfailing sense of beauty which guided his soul safely among uncharted paths. He was an Academician, latterly the president of this oldest and stablest art organization; but he was also among the special groups, like "The Ten" who represented something more than tradition. "To him the advent of the impressionism of the early nineties, with its high key and vibratory color," says Howard Russell Butler in the New York *Times*, "was like the opening of a door from darkness into light." And—


"THE MUSE OF MUSIC,"

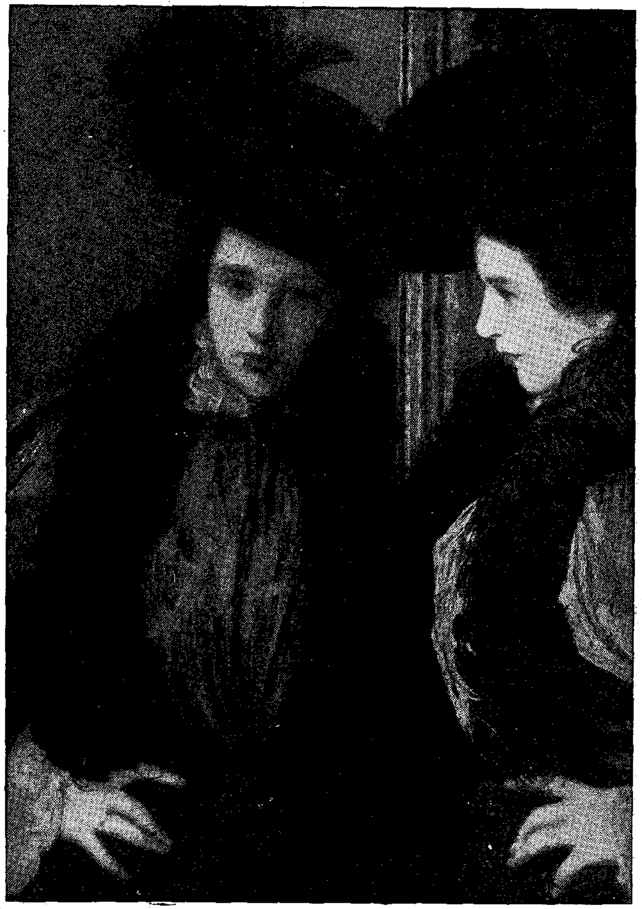
Representing the earlier period of J. Alden Weir's work, an artist who in later years more than once changed his "manner" in response to the stimulus of changing ideas in painting.

"From that time on he lived and worked with doubled energy—lived as a pioneer in a marvelous unexplored world, with a spirit of youth that he never lost. That was one of his charms and the basis of his influence.

"'Modern Impressionism' has brought good and evil in its train. Many are the wrecks that mark its erratic course with its many offshoots. The horde of modernists, with all their outcry, have usually very little to tell us. They have no deep stirrings of the soul. To them the manner of painting—generally a startling, grotesque exhibition of force—is everything. They strive to win by exaggeration.

"But Weir had restraint, based on a fine artistic sense. He was inspired by a deep love of the humanity and of the nature which surrounded him. He used the most modern means in a legitimate way and for noble purposes. He modernized truth and beauty.

"It is difficult to explain the secret of his artistic triumph or to estimate the lasting value of his final achievement. Some artists are known as expert technicians having fixt methods, others remain always experimenters. Weir belonged to the latter class. Never contented with his own way, he was always trying out the new. He had style, but he never had a style. He never settled down, but delighted in the continuous struggle to express his impression—the thought which inspired each work—but that impression with him outweighed the manner of expression. He tried many media and many methods, but was never fully contented with any."



"THE GREEN BODICE."

Looked upon by many as Weir's finest painting. It was presented to the Metropolitan Museum by the late George E. Hearn.

Where a man is "generally admired" the supposition is that he must be lacking in originality; but *The Evening Sun* takes pains to disprove the dictum in the present case:

"Strongly individual ways of seeing things and of expressing the creative impulse are pretty certain to rouse protest from others. But Weir managed to break the rule. He never asked leave of anybody to paint as he pleased—and he gave others the same right.

"Recently an honored president of the National Academy, he put his name also in the list of members of the newest art organization, which is a protest both against juries and against the limits of classification imposed by the Academy. He cherished tradition in so far as it guards the world's real treasures of hard-won truth. He hated the hardening of custom into a shell of meaningless form.

"Alden Weir was a man first. His art express his character. He submitted to discipline to learn the alphabet of expression. If he protested against the new, it was never because he was too old to understand youth. He was always growing himself. What better hope can we cherish for him than that which Kipling sang in 'L'Envoi'—the ten-league canvas, the brushes of comets' hair, and the power 'to work for an age at a sitting and never be tired at all.' But we doubt if this man who so loved his work will take the preliminary 'eon or two' for rest."

What is it, asks Mr. Cortissoz, in *The Tribune*, that, making his death a grief to those who knew him, must also bring to every one interested in American art a sense of loss?

"It is the thing that led early in his career to his being called just 'Weir'—his ardor for beauty, his lofty standard, his energy in the quest for whatever was fine in art. Weir recognized by instinct the perfect work of art. There are some delightful stories of his European experiences, those of a modest artist placed by collectors who were his friends in a position to rub Aladdin's lamp when he peered into a likely corner. He it was who bought for Erwin Davis the 'Joan of Arc' by Bastien-Lepage which Mr. Davis gave to the Metropolitan, and if I am not mistaken it was to him that the same collector was indebted for one or both of the two Manets which he gave to the same museum, the 'Boy with a Sword' and the 'Woman with a Parrot.' It all happened thirty years ago and more—the Davis gifts were made in 1889; but there stays in the mind a delectable anecdote of Weir suddenly invading Manet's studio, of his pouncing upon the pictures, and of the Frenchman's grateful astonishment. Possibly it is apocryphal. It does not matter. The tale is thoroughly in keeping with Weir's faculty for wise, disinterested transactions.

"There is another story of his buying at Agnew's the magnificent 'Portrait of a Man,' by Rembrandt (the portrait of a young sitter, in high hat and large flat collar), which is in the Marquand collection at the Metropolitan. Weir was going abroad, and, so the story runs, Mr. Marquand asked him to keep his eyes open for anything that struck him as superlatively good. He saw the Rembrandt in London and tho it cost something like $25,000, he bought it on the spot, cabling the news over. While he was waiting for a reply the dealers surprized him by offering to buy the picture back at an advance of $10,000. Weir smiled his enchanting smile and brought the Rembrandt home. Doubtless there are other incidents of a similar order which might be chronicled. There must have been numerous amateurs among his friends only too glad to lean upon his taste. For his taste was impeccable."

STUDENT RADICALISM—"Reliable rumor" has made it known that New York's Board of Education is drawing up a creed for school children. The New York *Globe* has seen one draft and finds that "the child will be asked to agree to revere and defend his country's flag, to respect and obey the President and the laws, to support American ideals of fair play, 'including the ideal of unhampered opportunity under the law for all,' to put patriotism above other loyalties, and to 'oppose all revolutionary movements, such as Bolshevism, anarchism, I. W. W.-ism, or any movement antagonistic to the laws of the United States or tending to subvert the laws of the United States.'" *The Globe* does not pretend to oppose the desirable ideals of the educators, but scents a danger in their methods:

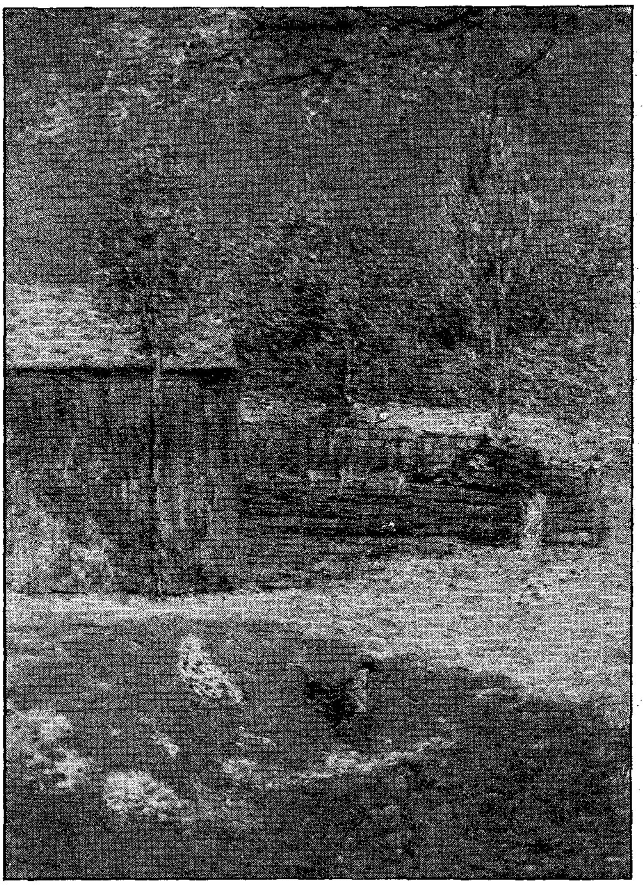
"Some of the children will understand in a general way what it means. Of these most will sign without hesitation. Some won't. These will be the children who will grow up into the wrong sort of radicals if they are not taken in hand. The Board of Education will take them in hand, if it follows precedents, by refusing them promotion or refusing to allow them to graduate—in short, by driving them out of the schools. This will leave in the schools the children who could not understand the board's creed, the children who understood it in a general way and agreed with it, and the children who understood it, and did not agree with it, but for the sake of their diplomas pretended to agree with it. The menace of juvenile radicalism will not have been removed. On the contrary, the young radicals who were estopped from getting an education in the public schools will be getting one in the anarchist Sunday-schools and out of pink periodicals and carmine pamphlets.

"If the Board of Education actually desires to eliminate radicalism from the schools it will have to use another method. It will have to teach it out. It will have to hang on to the children who have soaked up violently radical ideas and demonstrate to them that other ideas are better. It had better not attempt to drive legitimate political ideas out of any student's head, whether such ideas are radical or not, for if a board of education began to do this it might end by trying to make the students all Democrats or all Republicans."

OUR LITERARY MANNERS AND MR. WELLS'S

MR. WELLS'S LITERARY MANNERS are given an airing in an outburst attacking the manners of literary America. He sends *The Atlantic Monthly* a tingling letter over the persistence of statements here that he is the author of "Barbellion's Diary." He has said that he didn't write it, just as Sir James Barrie has said that he didn't write "The Young Visiters." If Americans think they are pressing a compliment on Wells and Sir James in their "damnable iteration" they are undeceived by this letter, for which Mr. Wells seems to desire publicity. His assumption is that Barrie will be equally grateful, and we must admit he ought to if it is equally fixt in his mind that America looks upon British writers as "cheats and liars." What Mr. Wells tells *The Atlantic* as "the chief insult"—

"lies in the extraordinary presumption—which yours is not alone among American reviewers in making—that an English writer is a barefaced cheat and liar, that he will say he has not written a book which he has written, and that he will persist in this falsehood until he is exposed by the sleuthlike activities of 'critics' between the lines of the suspected document. I have said clearly that I have had nothing to do with the writing of 'Barbellion's Diary.' I would repeat it here and now. 'Barbellion' is what he professes to be, a dying man, an ex-assistant at the Natural History Museum; he and his circumstances are quite well known to Dr. Chalmers Mitchell, Mr. Arnold Bennett, Mr. Frank Swinnerton, and a number of equally reputable witnesses. Yet this silly and insulting campaign about the Barbellion hoax goes on and goes on in American 'literary' publications. It is even sillier than the persistent attribution to Sir James Barrie—in spite of his plain denial—of 'The Young Visiters.' People over here know all about Daisy Ashford; the book is just exactly what it professes to be. 'Barbellion' manifestly wrote up his diary for publication and introduced a self-contradiction; Daisy Ashford picked up a quaint use of 'oozed' from one of Barrie's books; these things are to weigh against our word. What sort of idiotic world of cheating, forging, and hoaxing does your critic imagine we live in?



"MID-DAY."

The versatility of Weir is seen in his readiness to paint portraits, figures, or landscape at will. This landscape represents his latest period after he had espoused the methods of the Impressionists.

"The reviewer finds no difficulty in identifying Barbellion's style and personality with mine, which establishes his literary quality pretty conclusively. With an air of profound research, he writes of correlating the careers of W. N. P. Barbellion and myself. Well, there is a marvelous correlation. I was a student of biology, among other subjects, at the Royal College of Science in South Kensington between 1885 and 1888; Barbellion was an assistant in zoology (which is notoriously a branch of biology) at the Natural History Museum at South Kensington—which from America looks very close to the Royal College—in 1914. Our parentage, private circumstances, everything else in our lives, has been widely divergent—but that biology! Most suspicious! The differences of style are really so great that they reach out at, and positively prod your critic. The diary has passages of a kind, for which I am—how shall I say it?—temperamentally indisposed. They can not stay him on his foolish course. They merely produce this, one of the most stupid sentences ever written by a critic: 'Such passages make me feel that a great novelist may, perhaps, be ridding his spirit of some accumulation that has been held in check in works published under his own name.' So where Barbellion is like me, it proves him me, and where he is unlike me, it proves me a dirty rascal. Well—I ask you—is this American criticism?"

Mr. Wells has sold so many books in America that it would furnish a really interesting literary phenomenon if he could be found wholly unable to answer his own question. If he really needs help the Kansas City *Star* furnishes some upon the particular point of the "genuineness of recent English literary avowals":

"In 1917 there appeared in London, and subsequently in America, a book called 'Christine,' by Alice Cholmondeley. It was a series of letters written by an English girl to her mother from Berlin and other places in Germany, covering a period from May to August, 1914. In the preface Mrs. Cholmondeley tells the reader Christine was her daughter, and that she died in Stuttgart three days after the date of her last letter. For nearly three years the mother kept the letters private, not alone because the love in them made them sacred to her, but because at that time she believed the judgments in them, of Germans and Germany, too severe and sweeping. But when the German character was at last revealed to the world in its true light the mother of the dead girl, whom the war killed, she says, 'just as surely as if she had been a soldier in the trenches,' felt she ought to publish these last mementoes of her loved one, to share her grief, as she says, for the value there may be in her lost daughter's picture of Germany, 'which it will be necessary to keep clear and naked before us in the future if the world is to be saved.'

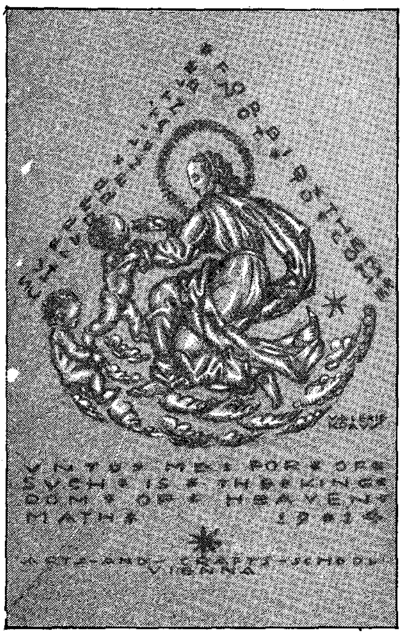
"None could doubt the sincerity and genuineness of a book put forth with such an introduction, and the book itself sustained the character thus given it. The publishers printed a facsimile of one of the letters and added the touch of a note saying it had been deemed best to alter some of the personal names in the manuscript. The American public, and the British so far as we know, accepted the book for what it purported to be. It was, therefore, with something of a shock that its readers afterward saw it listed by the publishers as a work of fiction, and read this frank advertisement of it: 'The striking and powerful descriptions of Berlin in the early days of the war . . . make "Christine" a notable addition to the fiction which has dealt with the great European conflict.' And the publishers go on to describe it as an 'interpretation' of the German state of mind comparable to that Mr. Wells gave of the English state of mind in 'Mr. Britling Sees It Through.'

"With the recollection of this recent 'sell,' American readers and reviewers ought not to be too harshly condemned when they look twice at books like 'Barbellion's Diary' and 'The Young Visiters.' Literary hoaxes have been common enough to put the public upon its guard. It is understandable, of course, that no author finds it agreeable to have imputed to him the work of another. But surely writers of such position as Wells and Barrie can afford to view with indulgence speculations that might indeed make lesser authors feel injured and unhappy, but which can not shake the pedestals of the truly great. Mr. Wells ought to be a sport and see it through."

RELIGION-AND-SOCIAL-SERVICE

THE CRY OF THE WORLD'S CHILDREN

"IF THINE ENEMY HUNGER, FEED HIM," is advice never more timely than to-day and peculiarly appealing when the call is made, not for the adults of the hungry lands of Central Europe, but for the little babies, who are dying in large numbers. In fact, the cry of starving children seems almost to circle the globe and rise to heaven, tho the voices of those in the Central Empires of Europe are perhaps shriller and more pitiful, even if they do not drown the cries from Siberia and even Mexico. The Pope's appeal, cabled from Rome and printed in the New York *Tribune*, is made "to the entire episcopacy of the Catholic world in behalf of the children of the suffering population of Central Europe." He adds: "What we order the Catholics to do we hope will be an example to others, to all of whom we address a paternal request. We are sure it will be well received." The situation in Austria, where the need seems most acute, is set forth by Chancellor Karl Renner, of the Austrian Republic, in statements prepared for the Supreme Council in Paris, and given out to the Associated Press:



ART FOR MILK.

A Christmas post-card painted by a student of the Vienna Arts and Crafts Museum sent to America to be sold for the benefit of the Vienna Children's Milk Fund.

"When I left Vienna we had only nine thousand tons of flour for six and three-quarter millions of people, a supply for six days only. Children are dying of hunger and cold in Vienna, and 85 per cent. of those between nine months and three years of age are suffering with rickets. The loss of weight on the part of nursing mothers is serious, resulting in diminution of the nursing capacity. For these reasons it is of utmost importance that supplies go forward at once, even while we are in Paris awaiting the result of the negotiations for credits, because weeks must pass before supplies ordered even now can reach Austria.

"By help I mean such assistance as will facilitate our task of keeping our nation alive and at the same time of fulfilling our obligations to the Allied Powers.

"We are now paying thirty prices for everything we buy. That is to say, the crown has depreciated to one-thirtieth of its normal value. At the same time we have exhausted our resources in securities and we have nothing left but the resources which, according to Article 197 of the Treaty of St. Germain, are mortgaged to the Allies for payment of reparations.

"I am going to ask the Supreme Council to release from that mortgage a sufficient amount of our national wealth to form the basis of security for loans that are absolutely needed to insure the feeding of our people. What we need first is a long-term credit abroad of a hundred million dollars with which to procure food until the end of October, 1920."

Austria's divorced partner, Hungary, suffers a plight no less distressing. Her woes were set forth by a woman of American birth, the Countess Széchényi (*née* Gladys Vanderbilt), who declares in the New York *Times* that "96 per cent. of the babies in the State Infant Dispensary of Budapest died last March," and even in June "the percentage had been decreased only to 63." Mr. Hoover's plan at present in operation is "to feed 100,000 children one meal a day at five cents a meal for seven months." The European Children's Fund has large stocks of food at Triest, but, according to Mr. Hoover, these can be drawn on only as funds for their payment are furnished by the American-Hungarian Committee. The Countess draws a picture:

"The population of Budapest doubled from 1914 to 1917, having increased from 1,000,000 to 2,000,000, so that to add to the misery the people were overcrowded. Besides this, there were the total lack of linen and the terrible scarcity of soap. There was no paint, labor was so high that no one thought of making repairs, so that the standard of living became more and more sordid and horrible. Before the armistice prices were about as follows, counting the crown at its normal value: Meat, $2.50 a pound; lard, $4; butter, $5, and tea, $45 a pound. No cereals could be bought except flour, no rice, coffee, chocolate, alcohol, or candles, or a long list of other things. Only good quality of cloth could be bought, and that cost $80 a yard. A linen sheet was $140; a spool of thread, $10; and the cheapest shoes, $80. Nearly all medicines had given out, and in the hospitals the patients were hungry and cold. In some, if a man had a nightshirt he could not have a sheet. Nothing made of rubber existed, and paper was used for cotton, wool, and nearly everything else, even bandages."

Such reports are confirmed by the British Director of Relief in Europe, Sir William Goode, who has recently returned from Central and Eastern Europe. To a New York *Tribune* representative he says:

"Unless America comes to the rescue, it is terrible to think what will happen. The greatest and most crying need is credits with which to buy food and raw materials. Two billion pounds sterling, half of which would go to Germany, may be accepted as a reliable estimate of the credits required. Europe can not supply these credits, so the heavy burden of lightening the suffering of millions of human beings falls upon America.

"The place of greatest need in Central Europe is Austria. The newspaper accounts of the misery in Austria are quite true, and the fact is that conditions there are worse than they are represented. Austria is now at the end of the English-French-Italian loan of $48,000,000.

"In Vienna the supply of food is below the normal living standards, and even the children, with the exception of a comparative few who can be given a little food by charity, are totally without milk. American relief organizations are doing excellent work, feeding from 100,000 to 200,000 children daily. I visited several American kitchens, one of which was in the late Archduke's palace. There the Americans provide 1,300 meals daily. This is one of Mr. Hoover's legacies to Europe, for which Europe is very thankful. . . . .

"As for Hungary, she is bled white by the Roumanians. First, like an army of locusts feeding on the land, 600,000 strong, it is calculated that Roumania has lifted from Hungary between 200,000 and 400,000 tons of foodstuffs; secondly, distribution and transportation are bad, and Roumania is using her railways for her army. There are difficulties even in the districts where the supplies are more plentiful.

"The Czecho-Slovak Government officials informed me that they had nothing like enough cereals to last them through the year. They say they want 700,000 tons of breadstuffs and can not get their industries going because there is no money to buy wool and other raw materials. And Europe hasn't got the money to lend to them. Poland is in almost exactly the same position, for that country, it is estimated, is 600,000 tons short in materials. And it is the same problem there, for they say there is no money or credits with which to buy."

"In this cause of starving and perishing humanity the United States Government must act," says the New York *Sun* editorially:

"This is a matter not of years and months, but of weeks and days. It is a work which must be done right now. It is a thing vividly and tragically before our very eyes. Starving Austria's demand is the first to be heeded because already her people are dying in the streets for lack of food. But before the winter has gone much further there will be others calling out to us for bread. Starving Poland will call. Starving Serbia will call. Starving populations in half a dozen other countries of Europe will call.

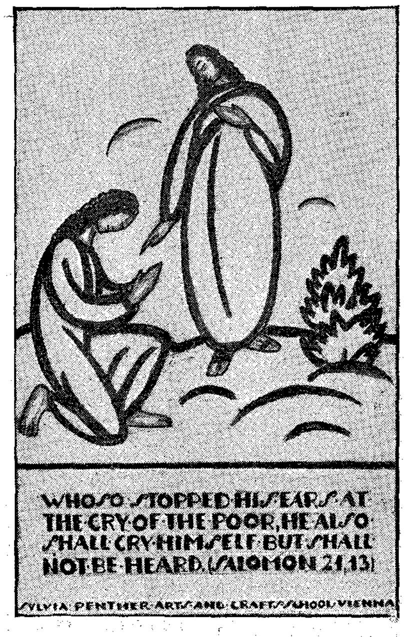
"Friend or foe of yesterday, the suffering and dying of to-day must not call in vain upon America, where, whatever our own troubles, granaries are bursting with breadstuffs, warehouses are packed with meats and fats, and this favored land is groaning with plenty."

The ravages of want in the ranks of the children do not stop at the boundaries of the Near East. In *The Japan Advertiser* (Tokyo) we read an appeal sent to that country by Countess Tolstoy, a relative of the late novelist, in behalf of children of Siberia:

"Unless some assistance in the most substantial form be sent to those who are working indefatigably in Siberia to stem the ravages of hunger, exposure, and disease, and sent quickly, one out of every three among the young children of Siberia is doomed to die this winter. For every two children who can manage to survive the rigor of the coming winter in some form or other there will be one new, small grave to greet the spring. . . . . . .

"Ask in almost every family and you will find that during the past few months there have been one or more deaths among the children.

"This, of course, applies particularly to the poor, but even among the prosperous there has been a decided increase in child-mortality. I know that in Tomsk, for instance, a university town and one where the average family seems well off, the mortality is higher than 30 per cent. The percentage of deaths among the children living in refugee barracks and the crowded railway box cars which house thousands along the Trans-Siberian line, is higher than 30 per cent. If accurate statistics were kept, the world would be appalled at the wholesale loss of life among the little citizens of a country struggling to be free."


WHOSO STOPPED HIS EARS AT THE CRY OF THE POOR, HE ALSO SHALL CRY HIMSELF BUT SHALL NOT BE HEARD. (SALOMON 21,13)
SYLVIA PENTHER ARTS AND CRAFTS SCHOOL VIENNA

ANOTHER POST-CARD.

If the American people really know what Vienna is facing, says the Neue Freie Presse, *"they will not view our destruction unmoved."*

Finally, attention is called to the needs of children on our own doorsteps by the formation of a Childhood Conservation League, who plan to spend from two to four millions a year for the next ten or fifteen years to save the child life of Mexico and the Central American countries. The secretary, Miss Agnes C. Laut, who has visited Mexico during the year, makes her report to the financiers who have underwritten the League and includes such statements as these that *The Times* quotes:

"It is known in Mexico City that 8,000 die annually of starvation, and that there are 116,000 homeless children. I have seen them with nothing but newspapers to cover them, and in Vera Cruz they stand near the restaurants, the strange look about them of those who have lived on fruits or vegetables, and wait for the bones and crumbs from the plates. I have seen five little children at once hiding behind a pillar where we dined in the open air, waiting for scraps. I told the waiter to feed one little fellow, but he grabbed the fishbones and a little gravy from my plate in a piece of newspaper, and ran off with them, saying that there were babies at home.

"Sufferings of the women and the little children at the hands of the bandits and the soldiers of Carranza can not be discust. I have been through the hospitals. I have asked the women if the unbelievable stories I have heard were true. They put their arms around me, and, with tears in their eyes, embraced me, when they knew that I sympathized. I have been taken to the house of a noble Spanish family, where the women have suffered as well as the poorest. They would break down and weep before they could tell me their stories.

"In ten years Mexico will be in a more primitive condition than before the arrival of Cortez. There is only one-half of one per cent. of the population of the country bandits, but they have the arms and the ammunition, and part of them are in the Carranza army.

"It is a wonderful country, a land of Eden, and a docile people, or they would have risen against these conditions long ago.

"You might beat them into pulp with an army, but you would do no good unless you built up an educated citizenship. Living is inexpensive there. A small sum will support a child for a year, and with every center of education you open you make a center of friendship for the United States. We must suppress the bandits and reopen the industries.

"The entire work of the League will be on a humanitarian basis. There will be no politics in it, and no sectarianism. It will work as far as possible with institutions already organized. Religious work will be left to the churches, each in its own way, following its own lines.

"There will be centers in each of the States of Mexico. Hospitals, training schools for nurses and for teachers, will be started. Mothers will be instructed in the care of their own health and in that of the children, and a general work organized for social and industrial betterment along many lines."

AMERICAN VERSUS CONTINENTAL SUNDAYS

THE AMERICAN SUNDAY, along with other American conceptions, is seen "passing through a period of challenge and reassertion." Mitigations of the law to permit baseball, golf, or theatrical entertainments have brought opposition along with the attempt. *The Christian Science Monitor* (Boston), however, sees the Continental Sunday as "the thing that is really opposing itself to the American idea of Sunday." We couldn't have escaped it along with our other accessions. "No such unfiltered flood of European immigration as that of the last two or three decades could ever have been permitted to roll in unchecked without subjecting American institutions to more or less European coloration." The fact and its consequences are viewed in this manner by the Boston publication, which speaks in the voice of New England conservatism:

"Just as there has been an easy-going tendency to accept European immigration as something that could not affect America, so a superficial liberalism has been willing to tolerate the European Sunday as something that could do America no harm. Recent experience, however, has stimulated more careful analysis with respect to matters of this sort. Americans who have national ideals at heart have discovered that not everything that has come unchallenged from Europe has deserved a welcome. And it is now a question worth asking, whether the European Sunday should be allowed to displace the day as an American institution.

"One thing to be noted in this connection is that a principal menace to Sunday as Americans observe it lies in the presence of the so-called 'Red' radicals. Not only do their European experience and racial traits prevent them from appreciating American ideas, including the idea of Sunday; but their radicalism is of the kind, Socialistic, Communistic, Bolshevik, or what not, that, while obsessed with a notion of reason, binds itself to atheism. It is too worldly-wise, too sophisticated, to confess to any belief in God. And this abjuration is the abyss which separates it forever from the real America. America, even more than some native sons realize, is officially a God-fearing nation. It does not, can not, abjure faith in deity. Not even the agnosticism or the atheism of individual Americans can ever blot out the fact that the founders of this nation, in official phraseology, recognized the power of Divine Providence and exprest a 'firm reliance' on its protection."

An experiment in a non-Continental Sunday was recently started in Baltimore when an attempt was made to reassert the blue laws of 1723 in applying them to "confectioners, druggists, and bootblacks." No arrests were made, but names of blue-law defiers were gathered for the grand jury. The Automobile Association invoked the laws in its own behalf, chiefly to prove their obnoxious character and close public garages. The Newark *News* has this comment on the situation:

"If it can be considered good medicine to provoke a boil on a man's neck to make him forget the pangs of rheumatism, then, perhaps, the present enforcement of the blue laws in Baltimore may be recognized as effective political therapy. Possibly, by making the people of a whole city highly uncomfortable and hotly resentful at a certain specific thing, their minds will be distracted from the multiplicity of troubles that go to make up the day's general discontent.

"At the behest of a grand jury, whose foreman is a clergyman, the police of Baltimore overworked themselves Sunday rounding up dispensers of soda-water, candy, ice-cream, cigars, newspapers, automobile gasoline, and other commodities that in 1723, the year the blue laws were adopted, were not considered as essentials. Barbers, newsboys, and others, among them a man engaged in repairing his house, were dragged off to the calaboose, charged with working on Sunday.

"Such a procedure, however, savoring of oppression at a time when the bulk of the population is disgruntled at conditions in general, has the potentialities of danger. Almost to a man the accused persons went right back again and continued to break the ancient laws, and they seem to have had public approval in doing so. The assistant State's attorney, as the prosecutor is called in Baltimore, intimated that his office would do nothing to punish the offenders. Such an attitude toward obsolete laws may be well founded in the present case, but there is a possibility of just and necessary measures being regarded in the same light and a gradual drift toward an anarchistic contempt of all law become a reality."

WARNINGS AGAINST SPIRITUALISM

SOMETHING LIKE THE OLD INVOCATION, "Protect us from our friends," seems to be the cry of one branch of the Christian Church against those who would overprove the doctrine of immortality by actually talking with the departed. The New York *Times* reports a warning uttered before the Catholic Library Association by the Rev. Dr. Joseph H. McMahon against Catholics attending spiritualistic séances. He told his hearers that the Church placed an "absolute prohibition upon any dabbling in spiritualism," and this was in view of the approaching visit of Sir Oliver Lodge, the English exponent of the faith. "The consciences of Catholics are now enlightened by instruction from the Holy See," he said, "and any Catholic attending a séance will be conscious that he is sinning against the light." Spiritualism in England has attained such a hold over the people that clergymen of the Protestant faith as well as religious newspapers have been outspoken in their denunciation. Dr. Frederick Lynch, writing in *The Christian Work* (New York) of his observations while sojourning there, says:

"This remarkable revival of interest in communion with the dead has naturally come about through the wide-spread losses from the war. There is hardly a home in England from which some boy has not gone forever during these last five years. We were recently addressing one of those great Brotherhood meetings in London—1,500 men present—and the chairman said: 'All the request hymns now are those which sing of heaven. There are probably not more than a dozen men in this room who have not lost a son or brother.' These millions of departed ones—can they be reached? Can one have communion with them? Can they break through the wall or partition between their world and ours? These questions arose as the natural yearning of a million hearts. Then, one by one, such men as Sir Oliver Lodge and Sir A. Conan Doyle published books saying: 'We have had communications from our boys. We have spoken with them, and with their comrades who perished on the field of battle.' 'Raymond' and 'The New Revelation' sold by the thousands. Thousands of parents said: 'If they, why not we?' And the result has been what one might almost call an overwhelming rush upon the mediums to seek communion with the dead. Everybody possessing any mediumistic power whatever has found his services in constant demand, and long lists of séances are now advertised in the papers."

Following is outlined the nature of the communications which are being received from these boys:

"The first thing, of course, in any séance is the establishment of identity. Most remarkable corroborations of identity are given. Identity being established, the next thing is to learn whether the dead are happy. The universal testimony is that they are, and that life is very beautiful where they are. We have been examining with some carefulness the testimony of such books as Sir Conan Doyle's and Mr. Leaf's, and their record of the testimony regarding the next world which they have received from the spirits of the departed may be summed up as follows: Life is taken up in the new world at the point where it is broken off here. A person is no better or worse when he enters upon the next world than he was here. If he would be good in the next world he must do good there, and if he would increase in wisdom there, he must strive for knowledge as he did here. Punishment in the next world is remedial, never vindictive."

Dr. Lynch is not an opponent of spirit communication, but feels it is a matter to be left in competent hands. He says:

"Our own feeling about the whole matter is that while it is perfectly natural to seek communion with those whom we have loved, and while there is no reason in the world why we should not talk with them if they are near to us, being, as we are, immortal souls and living in eternity, not time, yet the means of communication and the machinery of contact, so to speak, is as yet so imperfect it had better be left to the scientists for a time and made a matter of scientific research rather than of religious faith. As a matter of fact, nothing that has yet come through from the spirit world adds much to faith."

"London is medium-mad," says a writer in *The Daily Mail*, who views the matter as a social phenomenon:

"Never has occultism had so many fervent disciples. Fashionable mediums are having the times of their lives. Their 'consulting-rooms' are thronged with an eager crowd of inquirers, and they can afford to pick and choose their 'clients.'

"Most of them specialize. One is an adept at the direct voice. Another concentrates on clairvoyance or clairaudience. A third is a professor of psychometry. Others make a specialty of direct writing on paper or on sealed slates.

"Only a chosen few hold out inducements of being able to produce materializations of the spirit form. Very few go in for every class of phenomena. The consequence is that the earnest seeker of truth is passed on from one medium to another according to requirements.

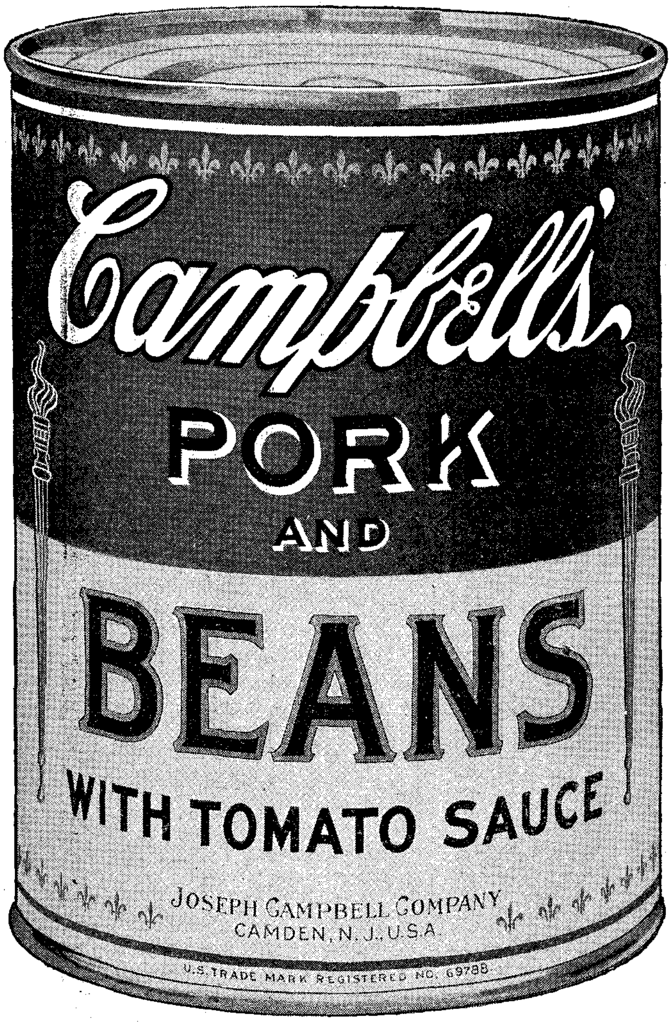
"Mediums have their own methods of securing information. Most of them have their touts and spies, who busy themselves not only by talking about the mediums and bringing in business, but also by finding out private facts in the lives of the possible clients.

"When a complete stranger comes to a medium the result is usually a number of commonplaces. The medium feels about to get a clue. 'Come back again next week and I shall be able to tell you more. The conditions to-day are not quite favorable,' he says.

"The client leaves the house and is followed by the medium's spy. Next time, if it is worth while, 'the conditions' are more favorable and the sitting much more satisfactory. The spy has been busy.

"Some mediums are blackmailers. They use the knowledge they gain from and about their clients to extort money from them. Others are professional conjurers, not of the first rank, who find mediumship a more profitable business than legerdemain."

MADE BY THE MAKERS OF CAMPBELL'S SOUPS


Campbell's
PORK
AND
BEANS
WITH TOMATO SAUCE
JOSEPH CAMPBELL COMPANY
CAMDEN, N. J. U.S.A.
U.S. TRADE MARK REGISTERED NO. 69788

Campbell's for Quality

Campbell's is a household word. It means good food to millions of Americans. Campbell's Beans are bought for their quality, their delicious flavor, their famous tomato sauce—a Campbell's triumph. Only the choice, perfect beans are used. These are slow-cooked until thoroughly digestible and nutritious. Lean bacon pork adds its appetizing relish.

15c a Can

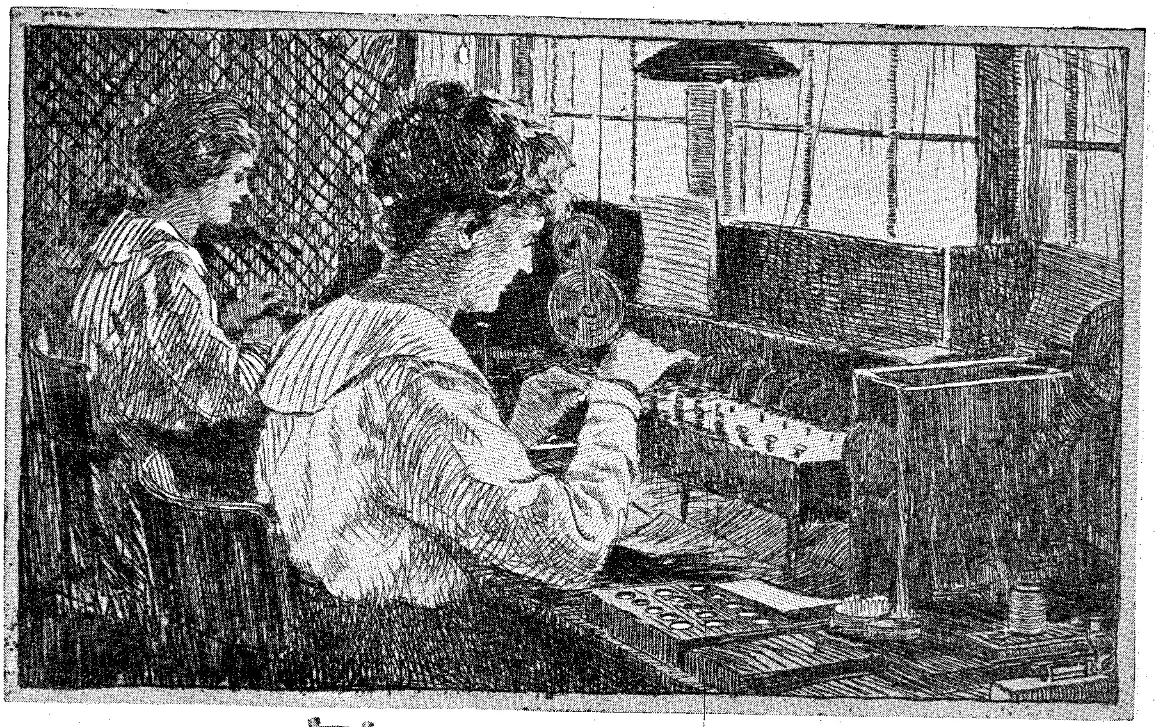
Except west of Mississippi River and in Canada

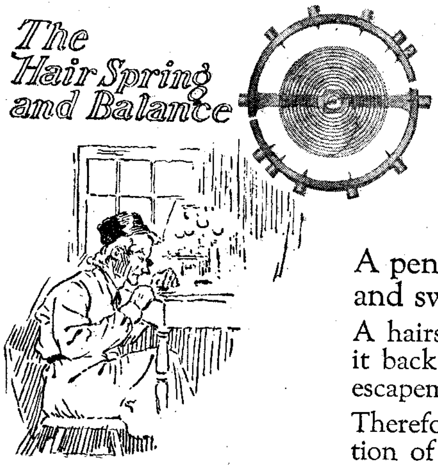
Campbell's BEANS

LOOK FOR THE RED AND WHITE LABEL

WALTHAM THE SCIENTIFICALLY BUILT WATCH

AND THE FOREIGN BUILT WATCH




The Hair Spring and Balance

Know "the Works" of the Watch You Buy

THE hairspring upon the balance wheel of a watch is similar in function to the effect of gravity upon a pendulum in a clock. A pendulum swings so far to left or right and is stopped and swung back to the point of impulse by gravity.

A hairspring retards the balance wheel of a watch and revolves it back to the point of impulse, which impulse is given by the escapement.

Therefore, as the hairspring controls the speed and arc of vibration of the balance, or its resultant, time, it is of the utmost importance to the time-keeping quality of the movement that the balance and hairspring be mated in perfect ratio as to the weight of the balance and the proper relation of that weight to the center of gravity and the strength of the spring.

To determine this absolute ratio, John Logan, a famous Waltham horologist, invented a vibratory machine (illustrated above) which so accurately mates the Waltham balance wheel and the hairspring, so perfectly selects the right hairspring for the particular balance wheel, that when finally assembled in the watch the watch is a natural time-keeper. This is one reason why the Waltham watch is famous for its close and constant time-rate.

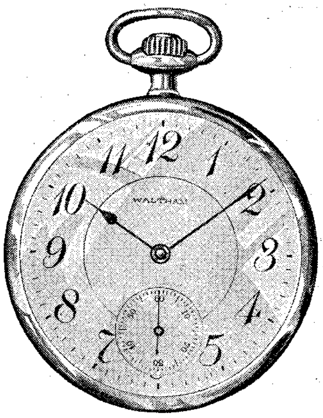
The foreign watch balance and hairspring are of varying construction. They are made by hand—one at a time—therefore it is impossible even for a skilled watchmaker to determine the ratio weight of the balance to the strength of the hairspring.

Its determination is by the uncertain rule of thumb method in trying various hairsprings until one is found which approximately performs its function.

This is yet another reason why the Waltham watch, due to standardized exclusive machinery, standardized material, absolute measurements and known ratios, is the watch you should insist upon buying—

And why the world's leading horologists came to Waltham for time.

This story is continued in a beautiful booklet in which you will find a liberal watch education. Sent free upon request. Waltham Watch Company, Waltham, Mass.



The Riverside
The most dependable moderate price watch in the world
$80 and up

WALTHAM

THE WORLD'S WATCH OVER TIME

CURRENT - POETRY

ONLY too much of present-day verse is begot, as it has been paradoxically said, of "fatty attenuation of the soul." A whole school of poets seem to rely chiefly on the lees of emotion to stir the sympathy of their readers. But the effect is to rouse sharp distaste in persons of healthy, normal feeling; and their wish for what is sound and whole is embodied in *Contemporary Verse* (New York) in the following exhortation:

THE POET'S PATH

By Daniel Henderson

When Chaucer sang—did he pursue
A mystic or exotic strain,
Not so! From folk he met he drew
His Canterbury train!

And Shakespeare of the deathless page—
What won him immortality?
Because he made our world his stage
He lives for you and me!

And Burns, his brief life madly spent,
Why does he sway us to this hour?
He voiced a ruined maid's lament!
He mourned a broken flower!

Ye who aspire to follow Song,
Spurn not the plain, broad path of art!
Walk with great poets through the throng
And feed the common heart!

A spontaneous and genuine tribute to some men of the A. E. F. who lie buried in France appears in the New York *Times*. They made the supreme sacrifice as readily as they would get into a scrap at home; and it is grateful to have their glory commemorated in their vernacular.

ACCOUNTING FOR THE GANG

By James J. Carroll

There's a Boy Scouts' bunch on the corner—Aw, gee!
An' ta think o' the fellers that usta be there:
Brady, Bertoni, Smith, an' McNair,
Scrap Dolan, Skip Harvey, Tod Heustis—an' me!
Them guys won't be there again, never no more,
An' Mullin, the cop that usta get sore
'Cause we couldn't be bullied or coaxed to keep quiet,
Can salt down his "Scatther, now! Yez are worse nor a riot."

Brady went first, in the Road o' the Ladies—
A spectacled Lieut. said that that place was Hades.
But I guess he meant Hell in the language he spoke.
The Jerrys sent gas ta us, then they came raidin',
But we gave 'em a skinful, our French allies aidin'.
We hammered 'em hard till they staggered an' broke—
'Twas the first chance we'd had at a two-sided bout—
But a lungful o' bullets put poor Brady out!

Dolan went next! Say, that kid was a dandy!
Gloves or bare knuckles he was ready an' handy—
He could hit like the kick o' a mule:
I had height, weight, an' reach on him, but even at that,
Whenever we scrapped I played mouse ta his cat.
But a shell crossed his guard at Bois Brulé!
Two outa the gang gone, we swore when we lost 'em—
Well, never mind that, the Jers know what they cost 'em!

Then we played in good luck till Marvoisin,
Where we sure gave the Jerrys the rout.
They hit all the high spots leavin' that place
An' I'll say they'd 'a' won if 'twas only a race.
I was helpin' ta hasten their hurry,
An' I'd no time for lookin' about,
So I lost sight o' Harvey, but, after a while,
We found him an' seven good Jers—in a pile!

The rest of us held till the Argonne,
But two days o' that cost us three.
An' the pair that was left had ta fight for the gang—
Bertoni an' me.
Now I ain't sayin' much for meself, but that wop
Was all over the job, an' wouldn't spell "stop"
Till a raft o' Hun bullets from a cammiflaged nest
Gave him the nudge 'twas *his* turn ta go west.

Seven good guys gone out! an' there's only me knowin'
That though they wasn't no heroes, they made a good showin'.
They didn't get no citations nor no crosses de gare,
But, while they lasted, them fellers was *there!*
Seven outa eight—ye can't call that bad!
They took what was comin', an' gave all they had,
An' none could do better than that, you'll agree—
Besides, there's left only three-quarters o' me!

In *Contemporary Verse* also we have memorial lines that emphasize the great spiritual transformation of the fighter.

CHANGED

By Ida Judith Johnson

In distant fields they lie,
Young lads whom you and I
Have teased and played with sunny afternoons,
Have kissed or flouted under gentle moons—
In distant fields they lie,
Beneath the blood-bought soil of Picardy,
Their names forever set
Among the great whom Time may not forget—
In distant fields they lie
So clothed upon with majesty,
So far—so far—
We can but view their shining as a star
That thrones its deathless fire
Above the puny reach of our desire—
Or love—or grief.
It seems beyond belief
That we have ever known
These lads to hero-stature grown;
That these have ever been to us the gay
Light-hearted comrades of a summer day.

Another tribute to the men "gone west" is contributed by Arthur Stanley Bourinot to *The Canadian Magazine*. This poem won the first prize (Veteran's Class) for poetry in the Canadian National Literary Competition.

CANADA'S FALLEN

By Arthur Stanley Bourinot

We who are left must wait the years' slow healing,
Seeing the things they loved, the life they lost—
The clouds that out the east come, huge, concealing
The angry sunset, burnished, tempest-tossed.
How will we bear earth's beauty, visions, wonder,
Knowing they loved them in the self-same way—
Th' exulting lightning followed by deep thunder,
Th' exhilaration of each dawning day?
Banners of northern lights for them loom greener,
Waving as waves the sea-weed's streamered head;
Where bent the swaying wheat, the sun-burned gleaner
Will find in their remembrance flowers of red.
Oh, life must be immortal for their sake:
Oh, earth will rest them gently till they wake.

A vivid portrait of rustic character shaded with deft strokes of humor appears in the New York *Tribune* under the title,

EXPERT OPINION

By G. S. B.

Old Walt—my reference, let me say,
Is to no poet good or gray,
But to the farmhand who each night
Brought us our milk—Old Walt, the light
Of his dim lantern holding high,
Each night would scan with anxious eye
Our porch thermometer, then stare
East, west, north, south, or anywhere;
Seeming, as somehow such folk can,
Too strangely wise for mortal man.
"Well, Walter, think it's going to rain?"
Each night we'd ask in vain;
For Walt once more would scrutinize
Thermometer and vaulted skies,
Then answer as he turned to go,
"By Jiminy-Chris'mas, I dunno!" . . .
He seemed to take a quenchless pride
In acting as a weather guide.

Of similar attractiveness, tho wholly different in character, is the portrait of a grandmother in the London *Westminster Gazette*.

THE GRANDMOTHER

By Gladys Hazel

Upon her folded hands the sunshine falls,
Bathing their lines and scars of toil in light.
And they are quiet as the evening earth
That waits in peace the coming on of night.

She has held children's children in her arms,
Whose babies soon may lie against her breast;
Now, in the shade of memories withdrawn,
In the high midday sun she sits at rest.

To her, remote, with her completed life
About her like a garment, age is kind,
For still her children, small and very dear,
Play in the secret dwelling of her mind.

Turning from portraiture to landscape, we find novelty in the picture of a Montana night in *Contemporary Verse*.

MONTANA NIGHT

By Elliott C. Lincoln

Montana night. The velvet of the sky
Is powdered thick with silver dust; below,
A realm of half-lights, where black shadows flow
To Stygian lakes, that spread and multiply.
Far to the east the Moccasins rise high
In jagged silhouette. Now, faint and low,
A night bird sounds his call. Soft breezes blow
Cool with the dampness of a stream hard by.
Dim, ghostly shapes of cattle grazing near
Drift steadily across the ray of light
From a lone cabin, and I think I hear
The barking of a dog. All things unite
To lull the senses of the eye and ear
In one sweet sense of rest; Montana night.

Tho there is no high lyric quality in "The Day of Rubber" in London *Punch*, there is a compact expression of the whole history of one of the wonders of modern scientific appliance.

THE DAY OF RUBBER

For centuries a tropic plant,
Obscure and insignificant,
Common to both worlds, West and East,
I did no good to man or beast.
Yet now my rich and viscous juice,
Turned to a locomotive use,
Has lent the rigid chariot wheel
The limber movements of the eel,
And oils that kindle and explode
Have made me Monarch of the Road.

EDUCATION-IN-AMERICANISM

Lessons in Patriotism prepared for THE LITERARY DIGEST and especially designed for School use

INDIANS IN THE UNITED STATES

INDIANS AND THE GOVERNMENT—The appearance of the Eighty-eighth Annual Report of the Bureau of Indian Affairs is immediate evidence of the long period during which Indians of the United States have been under government tutelage. This report is for the fiscal year ended June 30, 1919, and records the population of pure-blood Indians at 232,196; of the Five Civilized Tribes, including freedmen and intermarried with whites, 101,506. These combined make a total of 333,702. Their estimated incomes were $53,994,859, of which the Civilized Tribes received $8,910,722. Of the 84,922 Indian children eligible for school instruction there are 60,889 in attendance. In government schools there are 26,325; in Mission schools 5,441; in private schools 102; and in public schools 29,021. There were 10,000 Indians in the American Army forces, all of whom acquitted themselves well and many of whom were cited for special acts of bravery. For the conduct of the Indian Service, Congress appropriated last June $14,575,495. As Mr. Cato Sells, Commissioner of Indian Affairs, writes in his report to the Secretary of the Interior, he has for several years "recognized as of urgent administrative importance the separation of competent Indians from the incompetent and their release from government control." The main agencies are field competency commissions and "a consistent practise of the general policy of declaring competent all Indians of one-half or less Indian blood, who are able-bodied, twenty-one years of age, and not mentally deficient." During the years 1917, 1918, and 1919, 10,956 Indians were declared competent. This is a greater number in three years than the total of 9,894 in the ten years from 1906 to 1916. The policy of greater liberalism in dealing with the Indian dates from April 17, 1917, and was framed to the end that "every Indian, as soon as he had been determined to be competent to transact his own business affairs, would be given full control of his property and have all his lands and moneys turned over to him, after which he would no longer be a ward of the Government." With proper and faithful adherence to the present broader policy, it is averred, "we shall speedily sift the Indian who should stand on his own merits, pay taxes, discharge the service and exercise the freedom of citizenship, from those who will require the protection of the Government for some time before taking on such responsibilities." There are fully 75,000 Indians of the large number under the supervision of the bureau, who are in the same status as the reservation Navajo, Hualapai, Hopi, and Apache, in Arizona. Their property can not now, nor for many years to come, be wisely allotted, and we are told that—

> "There are thousands of full-bloods, and near full-bloods, whose landed interests and whose personal possessions and prospects are suggestive of a capacity for independent self-support, but who are not qualified to withstand the competitive tests that would follow a withdrawal of Federal guidance. To abandon these at the point in their progress where elementary acquirements are shaping into self-reliance and a comprehension of practical methods, would be to leave them a prey to every kind of unscrupulous trickery that masks itself in the conventions of civilization."

INDIAN POPULATION OF THE UNITED STATES, EXCLUSIVE OF ALASKA, JUNE 30, 1919.

Alabama	909	Montana	12,138
Arizona	42,346	Nebraska	2,448
Arkansas	460	Nevada	5,840
California	16,215	New Hampshire	34
Colorado	821	New Jersey	168
Connecticut	152	New Mexico	20,581
Delaware	5	New York	6,460
District of Columbia	68	North Carolina	8,235
Florida	573	North Dakota	8,891
Georgia	95	Ohio	127
Idaho	4,066	Oklahoma	119,101
Illinois	188	Oregon	6,607
Indiana	279	Rhode Island	284
Iowa	358	South Carolina	331
Kansas	1,441	South Dakota	22,829
Kentucky	234	Tennessee	216
Louisiana	780	Texas	702
Maine	892	Utah	3,048
Maryland	55	Vermont	26
Massachusetts	688	Virginia	539
Michigan	7,512	Washington	10,988
Minnesota	12,447	West Virginia	36
Mississippi	1,253	Wisconsin	10,211
Missouri	313	Wyoming	1,712

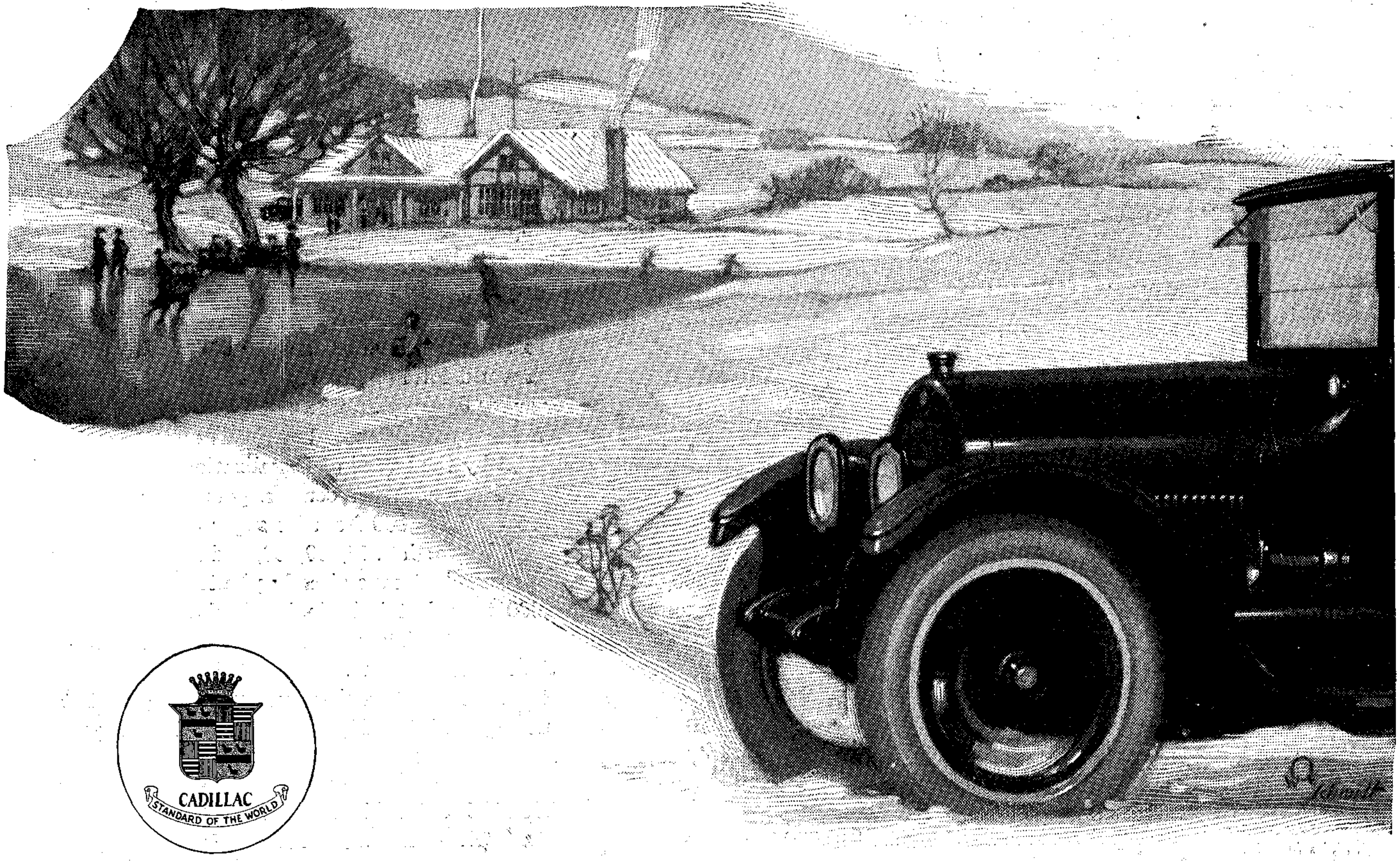
As far back as 1817 provision was made in a treaty with the Cherokees by which members of that tribe might become citizens of the United States. Subsequent treaties and acts of Congress contained provisions by which members of other tribes might become citizens. A law affording citizenship to all Indians was passed by Congress in 1887. This was the general allotment act, which provided for—

> "The allotment of lands in severalty and declared all Indians born within its limits who shall have complied with certain conditions to be citizens of the United States. The broad citizenship provisions of this act were modified by Congress when on May 8, 1906, it passed the Burke Act, since which law the issuance of a fee-simple patent has been the primary legal requirement for citizenship of Indians. In my judgment, the controlling factor in granting citizenship to Indians should not be based upon their ownership of lands, tribal or in severalty, in trust or in fee, but upon the fact that they are real Americans and are of right entitled to such citizenship.
>
> The act of 1887 excluded from its provisions as to citizenship members of the Five Civilized Tribes, but on March 3, 1901, Congress amended the sixth section of the general allotment act by inserting after the phrase "and has adopted the habits of civilized life" the words "and every Indian in the Indian Territory." Under this amendment, 101,000 Indians of the Five Tribes who received allotments and now living, and their children, are citizens of the United States."

The Commissioner cites the Supreme Court of the United States as deciding that "citizenship is not incompatible with tribal existence or continued guardianship, and so may be conferred without completely emancipating the Indians or placing them beyond the reach of Congressional regulations adopted for their protection." But Commissioner Sells points out:

> "When an Indian has been given a fee-simple patent for all of his lands, both original and inherited, and all individual and tribal funds of whatsoever nature turned over to him, that particular Indian will have become a full-fledged citizen of the United States in the full sense of all that term implies. He will no longer be subject in any respect to supervision by the Government, but will have the same right as any other citizen. His contracts will not be subject to governmental approval, but will stand on an equal footing with those of other citizens. There will be no restriction as to trade with him, and, in fact, whatever rights may be enjoyed by citizens of the United States will be his, and he will no longer be subject to arrest at the instance of a United States superintendent or by the Indian police, nor to trial and punishment by the courts of Indian offenses for misdemeanors over which those courts now have jurisdiction."

(Continued on page 130)



CADILLAC
STANDARD OF THE WORLD

MOST of us best appreciate our advantages when we lose them.

Cadillac owners find it a wholesome experience to be deprived of their Cadillac once in a while.

Contrast and comparison bring them back to the supreme comfort of the Cadillac, with gratitude and relief.

For it is undeniable that the Cadillac owner is continuously more care-free and comfortable.

He does not congratulate himself especially on a long tour, easily and pleasantly negotiated, in the Cadillac.

He expects it, and counts upon it, and is not disappointed.

And every town trip he takes is a reproduction, in miniature, of the supreme comfort which he enjoys on those longer tours.

To drive, or be driven, in a Cadillac, is a relaxation, not a responsibility—hence its wonderful hold on discriminating motorists the world over.

CADILLAC MOTOR CAR COMPANY, DETROIT MICH.

THE STANDARD OF THE WORLD

WORLD-WIDE - TRADE - FACTS

CANADA'S PROGRESS

(Bulletin of Canadian Bureau of Information.)

Field Crops:

1907	$350,000,000
1917	1,150,000,000

Excludes Animals and Dairy Products

Manufactured Goods:

1900	$481,000,000
1915	1,382,000,000

Exports of Fisheries:

1907	$10,362,142
1917	25,000,000

Aggregate External Trade with the World:

1907–8	$615,000,000
1917–18	2,548,000,000

Steam-Railway Mileage:

Miles in 1900	17,657
Operation in 1917	38,604

Mineral Production:

1907	$87,000,000
1917	193,000,000

Exports of Pulp and Paper:

1910	$10,000,000
1918	71,755,325

Bank Deposits (Chartered Banks):

1914	$1,144,210,363
1919 (July)	1,760,000,000

Canada's purchases from the United States for September were $77,980,468, a decline of nearly twelve million dollars as compared with September, 1918. . Canada's sales to the United States for the same month were $42,643,583, showing a decline of nearly three million dollars. While these declines are to be expected in comparisons with the war-period, it is interesting to note that the balance for the month is in favor of the United States to the extent of $34,000,000.

According to the monthly Summary of Foreign Commerce issued at Washington, during the nine months ending September 30 the exports to Canada totaled $519,620,000, and the imports from Canada were $338,559,256. The balance in favor of the United States is thus about one hundred and eighty millions for this period.

Canada continues to be the third best customer of the United States. The United Kingdom is in the lead with purchases from the United States for the nine months ending September to the value of $1,702,723,506, with France second at a figure of $689,987,022. Canada is thus a close third. She bought nearly twice as much from the United States as all the South American countries combined, and more than half of the total of United States exports to all the other countries of America.

The chief items in the exports to Canada were commercial automobiles, $2,206,871; passenger automobiles and parts, $6,708,983; dyestuffs, $1,402,611; coal, $32,409,658; copper, $2,571,262; cotton, $17,202,471; eggs, $1,579,253; binder-twine, $3,008,297; canned salmon, $1,305,000; furs and skins, $3,322,294; metal-working machinery, $2,420,481; steel plates, $10,237,308; steel sheets, $3,728,935; structural iron and steel, $5,180,142; tin plates, $4,922,690; wire, $3,600,000; kid leather, $2,330,103; bacon $9,981,605; crude mineral oil, $4,907,933; refined oil, $3,848,314; gasoline, $4,084,642; cottonseed, $4,407,121; tobacco, $5,977,466; and wearing apparel, $2,185,208.

There is a marked decrease in the exportation to Canada of these commodities, with the exception of automobiles, dyes, and canned salmon, which show an increase.

The chief imports from Canada were cattle, $25,336,097; coal, $2,849,911; copper, $7,154,017; flax, $1,963,323; raw furs, $13,473,516; hides, $10,183,433; beef and veal, $4,099,467; wool, $6,270,167; paper, $38,078,828; wood pulp, $17,780,824.

CZECHO-SLOVAKIA TRADE

The value of the exports of the Czecho-Slovak Republic for the first four months of this year was (without coal) 737,606,778 crowns and that of the imports 556,959,104 crowns, thus giving the new republic a favorable trade balance.—*Guaranty Trust Company.*

SUGAR SITUATION SUMMARIZED

Figures recently published by *The Weekly Statistical Sugar Trade Journal* estimated that Cuba will produce 4,300,000 metric tons of cane-sugar in the crop of 1919–20, out of an estimated total of 16,600,000 tons of cane- and beet-sugar combined. This compares with an actual production in Cuba of 4,000,000 tons in 1918–19, out of a world total of 16,320,654 tons.

Contracts for sugar delivery in excess of 8 cents per pound in Cuba have been made, as compared with an average of 5.55 cents per pound fixt by the Board of Equalization for the 1917–18 and the 1918–19 crops. At 7 cents a pound in Cuba, the island will receive $663,200,000 from its sugar crop alone. At 8 cents the crop will be worth $756,800,000, and at 9 cents $851,400,000. There is sufficient cane already planted to produce in excess of 4,500,000 tons, but it is doubtful whether there will be a sufficient supply of labor and transportation facilities to produce more than 4,300,000 tons.

A *résumé* of the estimated world sugar crop puts the 1919–20 yield of cane-sugar at 12,261,000 tons and beet-sugar at 4,339,000 tons.

CROP STATISTICS OF THE PRINCIPAL COUNTRIES

PRODUCTION OF THE PRINCIPAL CROPS IN 1919

	1919	Per Cent. of the 1919 Production as Compared with the Production for the Same Countries in	
	Bushels	*1918*	*5 Yr. Ave. 1913–17*
Wheat[1]	2,040,509,000	93.5	96.5
Rye[2]	169,414,000	95.9	124.0
Barley[3]	550,090,000	89.3	101.8
Oats[4]	2,085,786,000	84.8	90.3
Corn[5]	3,126,194,000	114.8	104.4
Flaxseed[6]	26,492,000	61.9	60.9
Potatoes[7]	607,632,000	87.9	101.2
Rice, Japan	423,375,000	87.9	83.8
Korea	82,208,000	86.0	102.1
	Short tons		
Sugar-beets[8]	10,344,000	125.9	114.8

[1] In Spain, France, England, and Wales, Scotland, Italy, Netherlands, Roumania, Switzerland, Canada, United States, British India, Japan, and Tunis.

[2] Spain, France, Italy, Netherlands, Roumania, Switzerland, Canada, and the United States.

[3] The same as for wheat, except British India.

[4] The same as for wheat, except British India.

[5] Spain, Italy, Roumania, Switzerland, Canada, and the United States.

[6] Italy, Roumania, Canada, United States, British India, Japan, and Tunis.

[7] Scotland, Netherlands, Switzerland, Canada, and the United States.

[8] Spain, Netherlands, Switzerland, Canada, and the United States. (Cablegram to the Bureau of Crop Estimates from the International Institute of Agriculture, Rome, Italy, received November 24, 1919.)

JAPAN'S REVENUE SHOWS MARKED INCREASE

For the fiscal year ended March 31, 1919, the total revenue of the Japanese Government, in yen, amounted to Y1,478,992,540 compared with Y1,084,872,594 for the previous year. Expenditures were respectively Y1,017,035,061 and Y735,024,252. The surplus amounted to Y461,957,456 as compared with Y349,848,342 for the previous year. Ordinary revenue made up Y911,457,022 of the total, an increase of Y147,782,306 over the previous year. Tax receipts increased Y88,688,783. The revenue from income tax increased Y56,355,177 over the budget estimate. Extraordinary revenue increased from Y221,197,878 to Y567,535,517. War-profit tax receipts reached Y81,589,345.

Up to September 30 of the fiscal year begun April 1, 1919, total revenue amounted to Y314,726,336 against Y261,799,477 for the previous year. Ordinary revenue made up Y265,636,979 of the total. Receipts from taxes reached Y170,147,052, an increase of Y40,356,806. Income-tax receipts amounted to Y20,681,070. Extraordinary revenue increased from Y44,509,043 to Y49,089,357. War-profits taxes increased from Y538,066 to Y27,564,723.—*Japan Advertiser.*

EXPORTS OF GOLD

Over $100,000,000 of the gold exported from this country during the first nine months of the year went to the Orient. Japan took $56,000,000, China nearly $50,000,000, and India took a large amount. Large shipments to other countries included $33,000,000 to Argentina and $27,000,000 to Spain.

THE NEW Scripps-Booth

THE even greater worthiness of the new Scripps-Booth models—designed, machined and built in the new factory—evidences the advantages which result from ideal production facilities and close affiliations with many of the largest motor car builders.

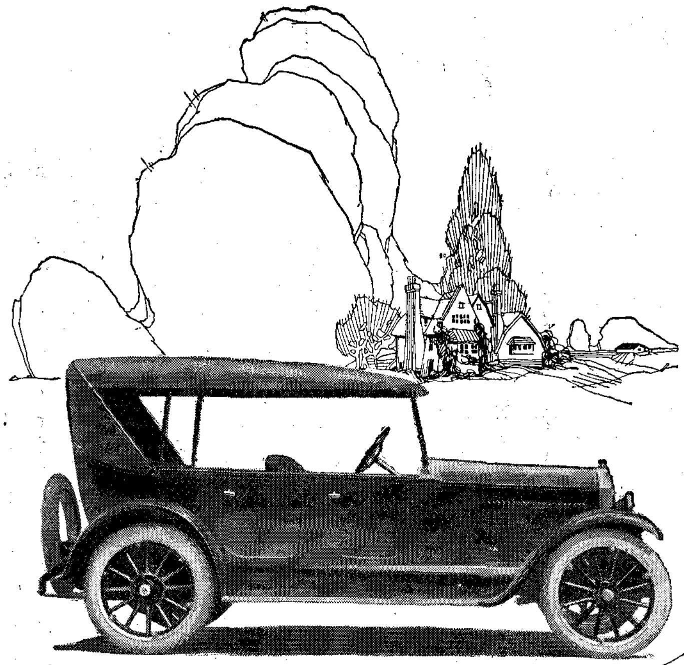
These new cars are distinctively Scripps-Booth in design, comparing in appearance with the finest motor cars—low, straight lined and lustrously finished in a variety of colors. Their appointments include many unusual features found only in the Scripps-Booth models.

Real comfort is obtained by deep upholstery, extra long, wide springs and a wheel-base of increased length to give easy riding qualities, yet to provide for a short turning radius. Scientific construction with an even distribution of weight, gives these models strength without bulk and road steadiness without excessive weight.

The Scripps-Booth six-cylinder valve-in-head motor develops ample power for all conditions—flexibility for congested traffic, with speed and hill climbing ability to meet all requirements.

Scripps-Booth Dealers Have These New Models on Display

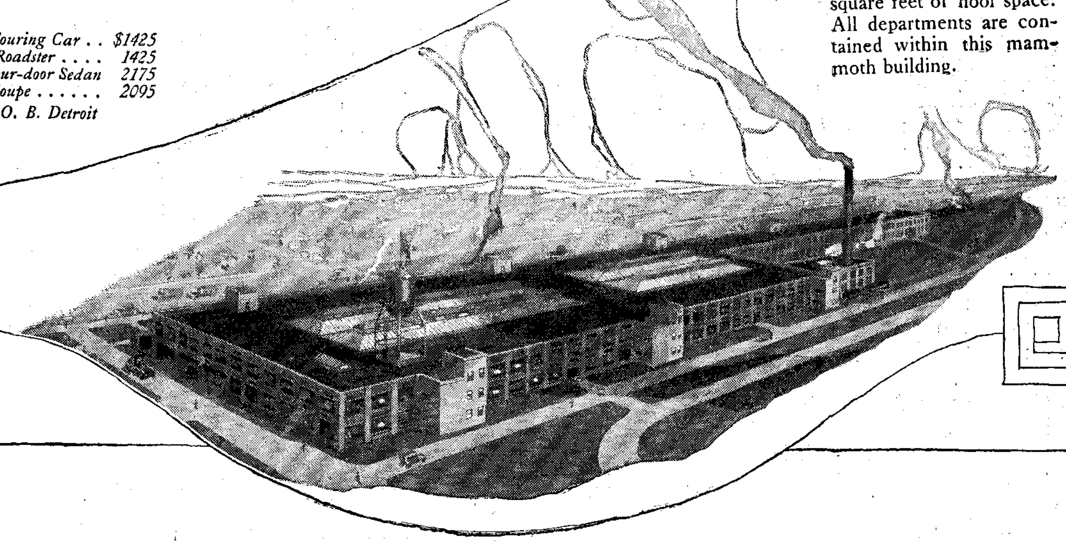
SCRIPPS-BOOTH CORPORATION
DETROIT, MICHIGAN



Five Passenger Touring Car	*$1425*
Three Passenger Roadster	*1425*
Five Passenger Four-door Sedan	*2175*
Four Passenger Coupe	*2095*

Prices F. O. B. Detroit

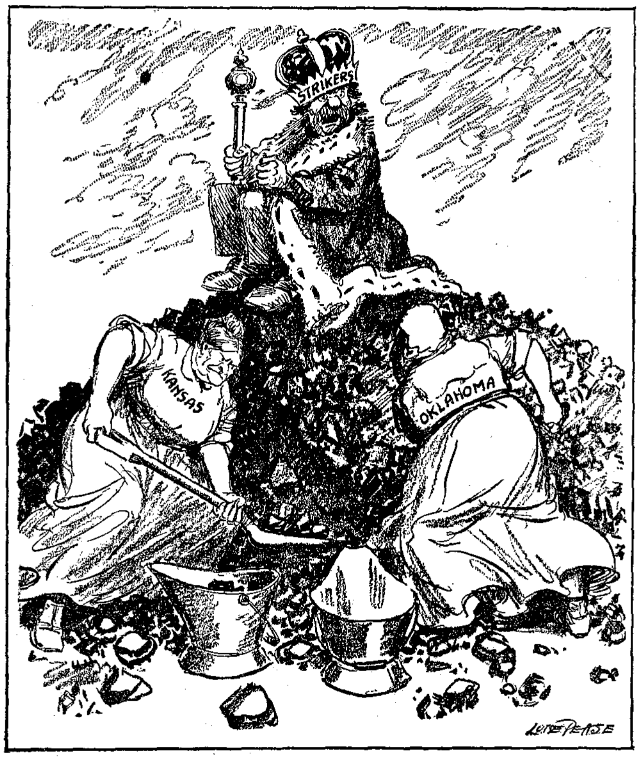
The new Scripps-Booth factory is one of the most modern and completely equipped automobile plants. It is located on a forty acre tract and comprises more than 360,000 square feet of floor space. All departments are contained within this mammoth building.



PERSONAL GLIMPSES

THEY DUG TRENCHES IN FRANCE AND COAL IN KANSAS

“WE WANT A THOUSAND VOLUNTEERS to dig coal,” announced Gov. Henry J. Allen, of Kansas, on Thanksgiving day. And two days thereafter as the Governor was looking over the application-cards of volunteers that had come in, he said: “Gee, aren't they a bully lot! I knew a lot of these boys in France, and I knew they would not fail.” Within thirty-six hours Governor Allen had more than four times as many men as he wanted, many more than he could possibly use. In his call the Governor had specified that he was not particularly anxious for office men or those unused to hard, outdoor labor. “We want husky young Americans who are not afraid to work,” he said, “the sort of lads who built roads, dug trenches, and constructed dugouts in the rain and snow and cold and under shell-fire in France a year ago.” And there was a great response, we are told. “They came from everywhere in Kansas,” says Cecil Howes in the New York *Tribune*. “They came, ex-service men, from the farms, the shops, the industrial plants, the railroads, the offices, schools—from everywhere that a whole-souled, hard-working, honest American lives.” It is explained that these men were not asked to work in the deep shafts, where only experienced miners can be used. They were sent to what are known as the strip-pits—great open places where the upper strata of soil and rock have been stript off with steam-shovels, leaving the bed of coal, from two to four feet thick, open and ready for the dynamite charges to break it up. A few experienced men were needed to operate the steam-shovels, and it was a question with the Governor whether these would be forthcoming. We read:



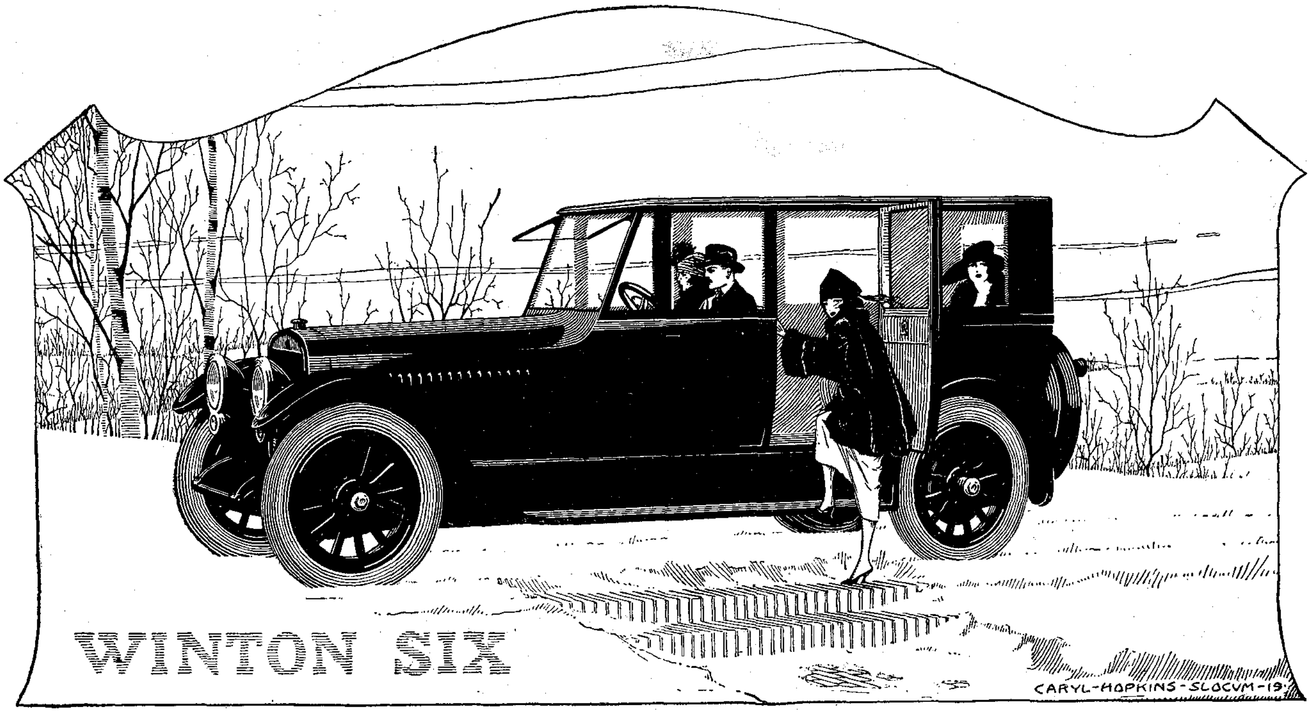
LÈSE-MAJESTÉ.

—Pease in the Newark *News*.

> For a few hours the Governor and the receivers were worried because of the big steam-shovels. These machines are very expensive and are the equal in size and capacity of those used by the Government in building the Panama Canal. To operate the mines successfully the steam-shovels are the key-links. Some coal could be got out, but not nearly enough to supply the urgent necessities of the State except with the steam-shovels in full operation. Experienced men were needed for this.
>
> But the Governor need not have worried about the skilled labor, for it came to his call just the same as the unskilled. Trained men left good jobs to join the ranks of the Kansas coal-miners, just as they left their jobs to join the Army and Navy a year and two years ago, when democracy was at stake.
>
> In less than forty hours the Governor had twenty-three complete shovel-crews of eight men each, and in less than fifty hours they were on their way to the coal-fields. By the time the receivers were ready to operate the mines on a three-shift-a-day basis there were more than enough skilled men to man the steam-shovels for every shift.
>
> Francis M. Gorman was a union steam-shovel operator in the coal-mines of Wyoming. His family had been left in Kansas for the winter. After the strike was called Gorman decided to pay his family a visit. He arrived home the day before Thanksgiving to find his wife and babies actually cold in their home. He went out and tried to get some coal, but found none. Then came the Governor's call, and Friday morning he went to some friends, arranged for them to take care of his family, and then took a train for Topeka.
>
> “My first duty is to my country and the people who are suffering from cold,” Gorman told Governor Allen. “I'll go into the pits. And I'll go as an American citizen, without being bound to any organization.” He reached into his pocket and pulled out a card-case, extracted a card showing him to be in good standing with the United Mine-Workers of America and tore it up.
>
> Guy Gascoigne, a member of a union in Topeka for eighteen years, did not tear up his union-card, but was one of the first to volunteer. “My allegiance to the State and the nation is above any union affiliations,” he declared.
>
> There were three steam-shovel crews near Kansas City. They were not working because of the bad weather and knew that there would not be steady work for a considerable part of the winter. The men went in a body to their foreman and told him they were going to help Governor Allen dig some coal, for they knew of the suffering among their own friends and neighbors and wanted to help.
>
> “Why don't you take the shovels along? They might use them down there,” said the foreman as he wished them good luck and prepared to join them.
>
> The men then went to the company officials for whom they were working, explained what they intended to do, and asked if the company would not lend the three big shovels if the State needed them. The manager of the company turned to a telephone, called the Governor by long distance, and in a few minutes had arranged for his men to join the volunteers and for the Governor to use the steam-shovels if he could find a place for them. The company arranged to load the shovels, and the men went back and put the shovels into shape for loading before they started for the mines.
>
> The Governor got a dozen complete shovel crews from brick- and cement-plants and big road and railroad grading outfits in exactly the same way, and the remainder of the men needed for the shovels were picked up by others who went out to get their pals to join the small army *en route* to the coal-mines.
>
> An entire grading crew of thirty men which had been building a State highway near Lawrence sent its foreman to the telephone to call up the Governor and tell him the thirty men, who had spent months on outdoor road-work, were ready to leave on the first train.

An idea of the diversified character of the men who responded to Governor Allen's call is furnished by the following:

> John M. Miller, a farmer, and his two sons walked into the Governor's office.
>
> “When do we start?” asked Miller. “We left the youngest boy and two girls at home to run the farm and feed the stock, and we are ready to go down and help dig some coal.”
>
> The most peculiar group of men which enrolled was composed of seven Mexicans from the Santa Fé railroad yards. They had been in this country several years working as trackmen on the railroad. They had their families here, living in the shacks furnished by the railroads for Mexican track-laborers. Only one could speak enough English to make himself understood, but all showed their willingness to go into the mines, and there wasn't any doubt as to their capability to do a full day's work.
>
> Included in the list of volunteers were nearly a hundred ne-



Never a Delay

Sedan
Victoria
Town Car
Limousine

THE automobiles used by United States Army Generals over there were closed cars, many of them Winton Six limousines; and the work they performed under the severest tests—weather of every sort, war-worn and shell-ripped roads, practically continuous running, without lights at night—is the best proof that the closed car is much more than a distinguished social vehicle.

Major General Cronkhite, U. S. A., who served in France, Belgium, Alsace-Lorraine, Italy, Luxemburg and Germany, driving as near to the front as a motor car could go, reports that his Winton Six limousine traveled 15,000 miles and that "thruout this entire period I never suffered a moment's delay."

May we send you literature?

The Winton Company
77 Berea Road, Cleveland, Ohio, U. S. A.

Winton Oil Engines (belt drive) for isolated power plants, and Winton Oil-Engine Generating Sets are produced by the Engine Works of the Winton Company. Write us your needs.

Prest-O-Lite
Battery
A Correct Size for Every Car

No Name Over the Door;
Yet Everybody Knows—

ON Fifth Avenue there is a Jeweler whose name is famous the world 'round.

You know why. You'd stake your fortune on the value and flawless quality of articles purchased there.

Their patrons, the owners of these well known cars, *know why,* because they accept a reliable name as guarantee of satisfaction.

They have Prest-O-Lite Batteries in their cars for the same reason. They know the name and that is sufficient. They can be sure of snappy ignition, an instantaneous start and bright lights at night because each of these cars was equipped with a Prest-O-Lite Battery by the maker at the factory.

For the same reason more than twenty makers of leading cars have turned to Prest-O-Lite, during the last two years, paying *more* to equip all their cars with Prest-O-Lite than other batteries would cost.

For reliable battery repairs—any make—go to one of Prest-O-Lite's 1000 Service Stations nearest you. And when your present battery is "shot", *replace* with a Prest-O-Lite—and enjoy driving.

"The Fastest Growing Battery Business in America"

THE PREST-O-LITE COMPANY, Inc., 30 East 42nd Street New York
Kohl Building, San Francisco
In Canada, Prest-O-Lite Co. of Canada, Limited, Toronto

groes from the 804th Pioneer Infantry, negroes drafted in Kansas during the war, who had seen service in France. They knew how to work and wanted to work, and they came to the State House in groups, asking for a chance to go to the mines.

At the Kansas Agricultural College there were two Filipino lads who were sent to the school by the Government to study agriculture so they could return to the islands as instructors. B. S. Pulanco and E. A. Cabacungan were among the first to crowd around the recruiting-table at the college to enroll, and they were in the first party of forty-two Agricultural College students to leave for the mines.

James Shawl and Allen Dale, two full-blooded Indians of the Potawatomi tribe, living near Mayetta, were among the first to enroll as coal-diggers. Both these Indians had been in France, being among the first to volunteer in the Rainbow Division ammunition-train, the first unit to be recruited in Kansas at the opening of the war.

Haskell Institute is the second largest Indian school in the country. H. B. Peairs, superintendent, gave all the Indians a big Thanksgiving dinner, and after it was finished the superintendent explained to the young Indians, many of whom were ex-service men, or S. A. T. C. men, the desperate situation Kansas women and children were in. He asked if there were any Indians who would help dig coal, and the entire body of 350 Indians arose almost as one man and volunteered. Some were too young and some were not physically able to stand the work, but Superintendent Peairs found from 175 to 200 Indians ready for service.

Among the prominent men who enlisted for service of various kinds were John S. Dean, a lawyer and a lieutenant-colonel in the Judge Advocate's Department during the war. Colonel Dean had charge of the settlements for lands taken by the Government for munition and other government enterprises. Earl Akers, former State Treasurer and cashier of a Topeka bank, enrolled as a worker. L. L. Uhls, former head of the State Hospital at Osawatomi and a member of the legislature, was one of the first to enlist.

"Americanism is at stake. When five per cent. of the people can bring suffering and disaster to the other ninety-five per cent., it's time to move. Let's go," he wired Governor Allen.

W. Eugene Stanley, lawyer, son of the late Gov. William E. Stanley, of Wichita, is a laborer in the pit. He is a candidate for the Republican nomination for Congress. He has just been discharged from army service, having been in the service fifteen months. He was an aid to Gen. Leonard Wood and was with General Wood at Gary.

Burton Rodman, who is rich and ordinarily would be engaged in attempting to sell expensive limousines as Christmas presents at this season, was a very earnest laborer with a pick.

"Some of us are here for three days, some for a week and some for the duration of the war," Rodman said, drifting into military terms. "And we have replacement troops ready to fill up any vacancies."

Roy K. Wells, five times wounded and promoted to captain while serving with the Princess Pats, invalided out and then sent back to France with the American Army and mustered out as a captain, was a hard worker.

Allen Burch, another lawyer, widely known as "Doc" Burch at the University of Kansas ten years ago, is also practising with a shovel.

The college students of the State responded with enthusiasm. At the Agricultural College 1,500 young men offered to go to the mines. Out of these the hardiest and those most used to hard outdoor work were selected—

The entire football squad of the University, numbering more than thirty husky young chaps, was the first to volunteer from the institution. They signed the enrolment blanks during the period between the first and second halves of the annual Kansas-Missouri Thanksgiving day game, when they were told that the Governor was going to appeal for help.

The faculties of the University, Agricultural College, Normal School, and Baker University, a Methodist college, all arranged to give full credits to those who volunteered their services to the Governor.

In addition to the men operating the steam-shovels, the other experienced men needed were cooks and those used to handling dynamite. There were more volunteers experienced in these lines of work than could be used—

There was no trouble getting the cooks, for ex-army cooks by the score volunteered their services, and enough were secured to take care of the food for all the workers. Men experienced in loading the charges and in firing dynamite came to the Governor in large numbers, and he had two or three times as many experienced shot men as were needed. The majority of those who failed to get listed as experienced shot men enrolled as common laborers. Several experienced shot-firers in deep-shaft coal-mines offered their services. These men use black powder in firing the charges that break down the coal in deep-shaft mining, but they knew nothing of the handling of the dynamite used in pit-mining.

Included in the list of volunteers were more than a score of experienced shaft-miners who had quit mining. Most of them had gone on farms and were hardened to outdoor work in severe weather. Most of them had been union men, but had allowed their membership to lapse.

Fully two-thirds of the men enrolled for coal-digging, we are told, were ex-service men, and, with one single exception, the American Legion backed the Governor to a man. Most of the volunteers went into the mines in the same spirit that they went into the trenches in France—

For example, a volunteer from Wichita appeared with a kit on which was stenciled "Capt. H. K. Cassidy, 165th Infantry, A. E. F."

A striking miner confronted Cassidy at the mine.

"Those mines are knee-deep in mud and water," the striker said. "You can't work in a place like that."

Cassidy looked his informant straight in the eye and replied: "I've bailed out trenches before. Have you?"

The striker passed on.

It seems that the only persons in Kansas who failed to display any enthusiasm over the situation were the miners. As we read:

In front of the Commerce Building in Pittsburg, the gathering-point where the miners invariably rally and move around and read the newspaper bulletins, sullen-eyed crowds watch army motor-trucks and soldiers pass and pass again all day long.

"These guys ain't the usual kind of scabs," one miner who had "looked over" the volunteers was heard to remark to another miner.

"No," said the second. "Why?"

"Well," said the first, "what would the usual scab do to-night? He'd come to town and get a drink, wouldn't he?"

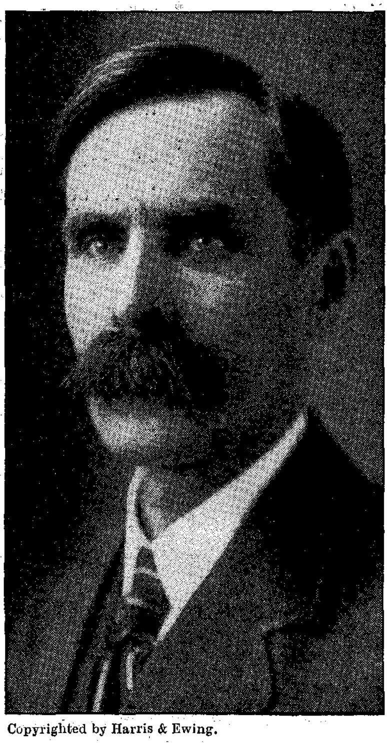
"Yes," was the reply.

"Well, I asked some of these new guys what was they going to do to-night. Four said, 'Write to the wife,' and six said, 'Write to the girl.'"

MILD-MANNERED MR. VOLSTEAD, THE "GOAT" OF THE WETS

FATE MUST HAVE BEEN in one of her most ironical moods when she selected Representative Andrew J. Volstead, of Minnesota, to draft the stringent Federal prohibition law. By that act the Minnesota man made himself particularly displeasing to all the wets in this broad land, and yet, we learn, he is by no means a fanatical dry, but rather, to judge by his own statement, "in the middle of the road." While the wrathy friends of booze may picture Mr. Volstead as a wild-eyed, long-haired zealot who never took a drink, and who would move heaven and earth to bar everybody else from joys alcoholic, the fact is, we are told, that the author of the Volstead Act is a slender, bushy-haired, heavy-mustached, gray-eyed, mild-mannered Congressman, who never made a prohibition speech in his life, never joined a temperance society, and never signed a temperance pledge. It is even said that in one of his campaigns to secure the nomination for Congress, his only opponent ran on a prohibition platform. The sole reason Mr. Volstead wrote the law which bears his name, it is said, was that it came along to be done as a regular part of his day's work while he was Chairman of the Committee of Judiciary. Of course, it is admitted that he made a good job of it, for he seems to have been unusually well qualified. During his fourteen years' experience as county prosecutor in Yellow Medicine County, Minn., he had learned thoroughly the nefarious ways of bootleggers, crooked druggists, doctors, and such, and when he wrote his law he apparently thought of them all. While it thus seems that Mr. Volstead can present something of an alibi, it doesn't appear to have helped him much. The fact of the matter, we gather, is that some one man had to be blamed for prohibition, and the logic of the situation placed that blame on the shoulders of the Minnesota Representative. "Letters that he has received, and is receiving, unsigned largely, show vigorously, and even profanely, that the wrath of the alcoholic hosts of the republic center upon him," says James B. Morrow in the St. Paul *Pioneer Press*. The fact that prohibition was brought on by the action of a number of men seems to have been overlooked by these letter-writers, probably on the principle that administering a "kick" to an individual yields more satisfaction than directing it against a crowd. Says Mr. Morrow:

> Personalization seemed to be both logical and desirable. An individual was demanded to whom signed and anonymous communications could be addrest; an individual on the back of whom the Aarons of the distilleries and saloons could pile the anger of themselves and the scorn and displeasure of their patrons.



Copyrighted by Harris & Ewing.

THEY ALL BLAME HIM.

Congressman Volstead drew up a bill for the enforcement of prohibition that leaves nothing to be desired—from a dry standpoint; but, we learn, he never signed the pledge, never joined a temperance society, and once ran for election against a Prohibitionist.

> Were Andrew J. Volstead a less serious person than he is, he would smile over the present situation as it bears on himself. Were he less of a philosopher, he might be filled with indignation. Were he a politician, his heart and legs might now be quaking and trembling.
>
> But he sits, sober-minded, in his office or in the House of Representatives, and, without fear or deviation, goes steadily along, item after item, in the program that he has adopted. Often he combs his long, black hair with his lean, nervous fingers, but there is never any other sign of mental disquiet. His face is turned one way and he doggedly walks in that direction—and never looks back. That direction is toward the laws, all the laws, that have been enacted.

Mr. Volstead is of Norwegian parentage. His father and mother were immigrants who settled in southeastern Minnesota near the Wisconsin line, where the father built a log house, in which the future Representative was born in 1860. The following brief sketch of his life is given by Mr. Morrow:

> The boy grew up on his father's land, went to the district school, and was taken into the Lutheran Church by the rite known as confirmation—and the minister, later, urged him to become a preacher. This fact, the act of the minister, stabilized at the start Andrew J. Volstead's character.
>
> But the church was as far removed from his plans as was agriculture. With the help of his father and by teaching school he completed his education at college and prepared himself for the bar. He practised in several places, for short periods, and then settled in Granite Falls, across the State from the county in which he was born, and on the border of South Dakota.
>
> The season of his going to Granite Falls was early spring. In the fall of the same year he was elected prosecuting attorney of Yellow Medicine County. This office he held unbrokenly during fourteen years and contemporaneously served as president of the Board of Education, city solicitor, and Mayor of the town in which he lived.
>
> Yellow Medicine County is populated by Germans, Scandinavians, Canadians, and Americans. Some townships, under the law of the State, were wet and some were dry, by a vote of their citizens. Into this mixture of conditions and conflict of sentiment came young Mr. Volstead, as county attorney.
>
> Dry townships were secretly wet in places. The Germans, for example, by hook or crook drank their lager beer. "You can't stop them," Andrew J. Volstead was informed. He will not say, even at this day, that he then had convictions on the liquor question.
>
> The law was the only matter within his vision. It said that the citizens of a township could vote alcohol in or put it away. "My duty," Andrew J. Volstead said, "and my oath require me to prosecute those who break the law."
>
> This he did, vigorously, so the story is told, during the fourteen consecutive years that he was the attorney of the county, an office that he obtained and held at the polls. And the wettest spot in the thirstiest German colony went dry—by petition!
>
> Seventeen years ago Mr. Volstead, as a Republican, was nominated for Congress in the Seventh District of Minnesota. He had competition for the nomination and a Populist was a candidate against him at the election. He received 20,826 votes in the fourteen counties of the district, which were four times as many as were cast for the Populist.
>
> Mr. Volstead's six succeeding elections to Congress were unopposed. The Democrats made no nominations, while the Populists, vociferously approaching the brink of political chaos, had gone over head first still talking. Three years ago, however, up for the Sixty-fifth Congress, Mr. Volstead had to take the stump against a Prohibition candidate. Beaten, the Prohibitionist turned Republican and last year attempted to defeat Mr. Volstead's nomination and again was whipt out of his boots.
>
> "Oh," Mr. Volstead said, when the writer inquired about the tactics he employed against the Prohibitionist, "I just kept in the middle of the road."

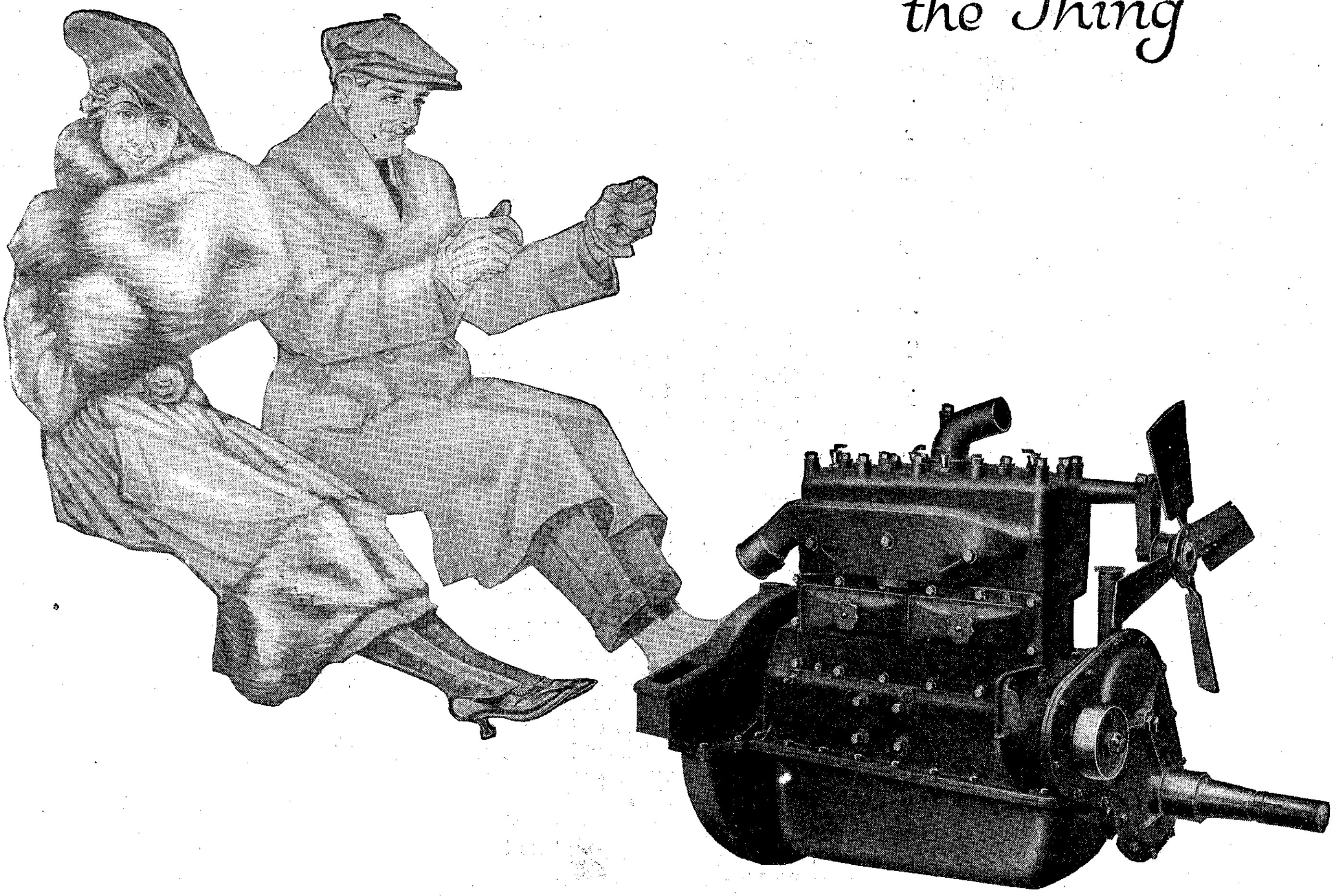
The preparation of a law that would make the Eighteenth Amendment effective was a somewhat sizable undertaking. It had to pass muster as to constitutionality, and it also had to be free from any other flaws which would render it vulnerable to the attacks the wets would make upon it the minute it was placed on the statute-books. The machinery for enforcement had to be created, and "intoxicating liquor for beverage purposes" had to be designated. To quote Mr. Morrow:

> Such was the task to which Mr. Volstead applied his talent and experience—he having decided to write the bill himself. The United States, he saw, with respect to liquor, was Yellow Medicine County multiplied several thousand times over. There had been bootleggers in Minnesota, crooked druggists and doctors, and all the other gentry who had contrived to set the law at naught. And Mr. Volstead had outfought them and had learned their ways from first to last.
>
> So, in course of time, there came from under his hand what is now known as "the National Prohibition Act." It would fill about two pages of a large newspaper. This measure, passed by Congress with an overwhelming vote, and later repassed over the President's veto, is meant, so its title reads, "To prohibit intoxicating beverages and to regulate the manufacture, production, use, and sale of high-proof spirits for other than beverage purposes, and to insure an ample supply of alcohol, and promote its use in scientific research and in the development of fuel, dye, and other lawful industries."
>
> "The object of the law," Mr. Volstead tersely said to the writer, "is to drive the saloon out of business and to stop the use of anything containing alcohol in sufficient quantity to be intoxicating as a beverage. It will go into effect soon after New-year's day, 1920.
>
> "No person thereafter shall manufacture, sell, barter, transport, import, export, deliver, furnish, or possess any intoxicating liquor, except in limited and specified cases, and the courts and all officers of the law are directed liberally to construe the act to the end that the use of intoxicating liquor as a beverage may be prevented."

While working over the prohibition law, it seems that Mr. Volstead has developed great expertness as a definer of what is and what isn't, so far as those queries relate to booze. Anybody yearning for enlightenment on any point pertaining to prohibition would do well to consult the gentleman from Minnesota, and the thing, whatever it is, will be made perfectly clear to him in a jiffy. We submit some samples of his interpretations:

> "What is intoxicating liquor, as described by the law?" Mr. Volstead was asked.
>
> "Anything by whatever name it may be called that contains one-half of one per cent. or more of alcohol," he answered. "Brandy, whisky, rum, gin, beer, ale, porter, and wine are prohibited specifically."
>
> "Is a farmer permitted to make cider?"

"The Motor's the Thing"



Herschell-Spillman Motors

NO car is a good car without a good motor. While it is possible to build a poor car around a good motor, to do so is not sound policy. Therefore a good motor argues a good car.

Since nineteen hundred, HERSCHELL-SPILLMAN have been building good motors—we and the users of them say the best motors—thereby putting the heart in many good cars.

See that the car you buy has the motor with the Clover Leaf name plate. It is more than an indication that you get a good car—it is positive assurance that you get unequalled motor performance.

Builders of high grade motors since nineteen hundred

Four
3½" x 5"

Six
3¼" x 5"

HS MOTORS

"The Pick of the Field"

The HERSCHELL-SPILLMAN MOTOR CO.
North Tonawanda, N.Y.

authorities authorities

"He is, and fruit-juices also, for use in his home, provided they are not intoxicating."

"But a raw barrel of cider gradually ferments and becomes alcoholic while it is lying on its side in one's cellar," the interviewer observed.

"That may be so, but the owner of the cider dare not sell it or give it away, unless to a vinegar-factory having a permit from the Government, and if he drinks the cider and causes trouble in the neighborhood he will get into difficulties himself."

"May one have liquor in his house after the prohibition law goes into operation?"

"It will not be unlawful to possess liquor in one's private dwelling, if the dwelling is used only as a place in which to live. A dwelling may be a house, or a room or rooms in an apartment-house, boarding-house, or hotel. The liquor so possest, however, must be for the personal consumption of the occupant of the dwelling and of his family and of his *bona-fide* guests when they are entertained by him in his home.

"But," Mr. Volstead went on to say, "it will be difficult to get liquor after the law goes into effect. It can not be made or sold or transported, or given away, if it is to be used as a beverage. Breweries can not brew beer; distilleries can not manufacture whisky; wineries can not make wine. Nor can the railroads haul liquor as freight. It can not be transported in wagons, buggies, automobiles, water, or aircraft or any other vehicle. If it should be, the liquor will be confiscated, the vehicle also will be confiscated, and the person having the liquor will be arrested."

"Will it be possible to obtain liquor on presentation of a physician's prescription?"

"Yes; it will be possible, but the process will be long, and, it is hoped, discouraging. I had a good deal of trouble with some druggists and physicians in Minnesota. There are unsuccessful and unscrupulous doctors as well as lawyers. A dishonorable doctor, whose legitimate practise is not sufficient for his support is likely, if there is an opportunity, to fall into evil ways. He will write a whisky prescription for a dollar, or even less.

"No liquor, under the prohibition law, can be sold by any one at retail, except by a pharmacist, and he must have a permit from the national Government and be licensed by the officers of his State to compound and dispense medicine prescribed by a licensed physician.

"A druggist, then, may deal in liquor. But once it is in his store, how may John Doe, a customer, purchase it for his own use? He must go to a physician, who has been duly licensed to practise medicine and is actively engaged in such work.

"Also the physician must have a permit from the National Government to prescribe liquor. The permit will be limited as to time and place. Permits will not run from year to year. A doctor can not prescribe liquor for persons living outside the zone of his practise.

"The machinery having been set up by which a person may be permitted through a druggist and a physician to purchase liquor, the next step for him is to get the liquor. Let us consult the law and see how the liquor can be obtained. 'No one but a physician,' the act reads, 'holding a permit to prescribe liquor shall issue any prescription for liquor. And no physician shall prescribe liquor unless after careful physical examination of the person for whose use such prescription is sought, or if such examination is found impracticable, then upon the best information obtainable, he in good faith believes that the use of such liquor as a medicine by such person is necessary and will afford relief to him from some known ailment.'

"Having decided that his patient actually would be benefited by the liquor, the physician writes a prescription. He is limited to a pint. Nor can he write another prescription for the same person until at the end of ten days. 'And no prescription,' so the law lays down, 'shall be filled more than once.'

"Broadly, such are the acts that can be performed by physicians and druggists. But there are certain regulations that they are required to observe. The physician must write in a book supplied him by the National Government a history of each liquor prescription that he gives. He must state the date of the prescription, the quantity of liquor prescribed, the name of the patient and the ailment from which he is suffering, and the amount and frequency of the dose.

"Furthermore, the prescription must be written on blanks printed by the Government, and a stub, otherwise a copy of the prescription must be returned to the Government. Druggists also must keep similar records and internal-revenue experts will examine all of them as they come in. Inspectors, unknown to the public, will be abroad in the land. Doctors and druggists violating the law will be severely punished."

"Churches, of course, may use wine for sacramental purposes?"

"Surely," Mr. Volstead replied. "Permits will be issued for the manufacture, transportation, importation, and sale of wines for use by religious bodies, but such wines can not be sold, bartered, exchanged, or furnished to any person not a rabbi, a minister of the gospel, a priest, or an officer authorized to act in the matter for a church or congregation. Records, likewise, must be kept of all such transactions.

"The Constitution now outlaws the liquor business, or will after January 16, 1920," Mr. Volstead went on to say, "and Congress and the forty-eight States are required to provide laws for carrying prohibition into effect. The country can not be half wet and half dry. If it were, troubles would multiply, and neither the 'wets' nor the 'drys' would be satisfied with the situation. I have seen sheriffs and prosecuting attorneys drinking at clubs in dry territory, and I have seen solid and prosperous business men who were made sots and bankrupts while members of such clubs."

Mr. Volstead admits that his law is a little drastic, but in the same breath says, in effect, it is a mere pink reflection of what it's going to be when people get a little more used to prohibition. Of course, the Eighteenth Amendment may be repealed—with the same ease, we take it, that a moderate-sized camel wanders through the eye of a needle. We read:

> "The National Prohibition Act passed by Congress simply puts into effect the will of the people as exprest when they adopted the Eighteenth Amendment to the Constitution. Congress has attempted to stop all use of liquor and, of course, such performances as I have mentioned—the secret drinking of liquor by sheriffs and prosecuting attorneys in violation of their oaths of office.
>
> "It is said by some persons that the law is drastic. I reply that it will be made even more severe after the country has learned what prohibition means. It will be tightened in several places, and, in my opinion, will never be repealed."
>
> "It can be repealed, however," the interviewer remarked.
>
> "Yes; but the country would have to choose a Congress that would be willing to resubmit the question to the States, and then the legislatures of three-fourths of the States would be required to vote the prohibition amendment out of the National Constitution. The task, in my judgment, would be hopeless."

WHAT THOSE "COSSACKS" THINK OF THE STEEL-STRIKERS

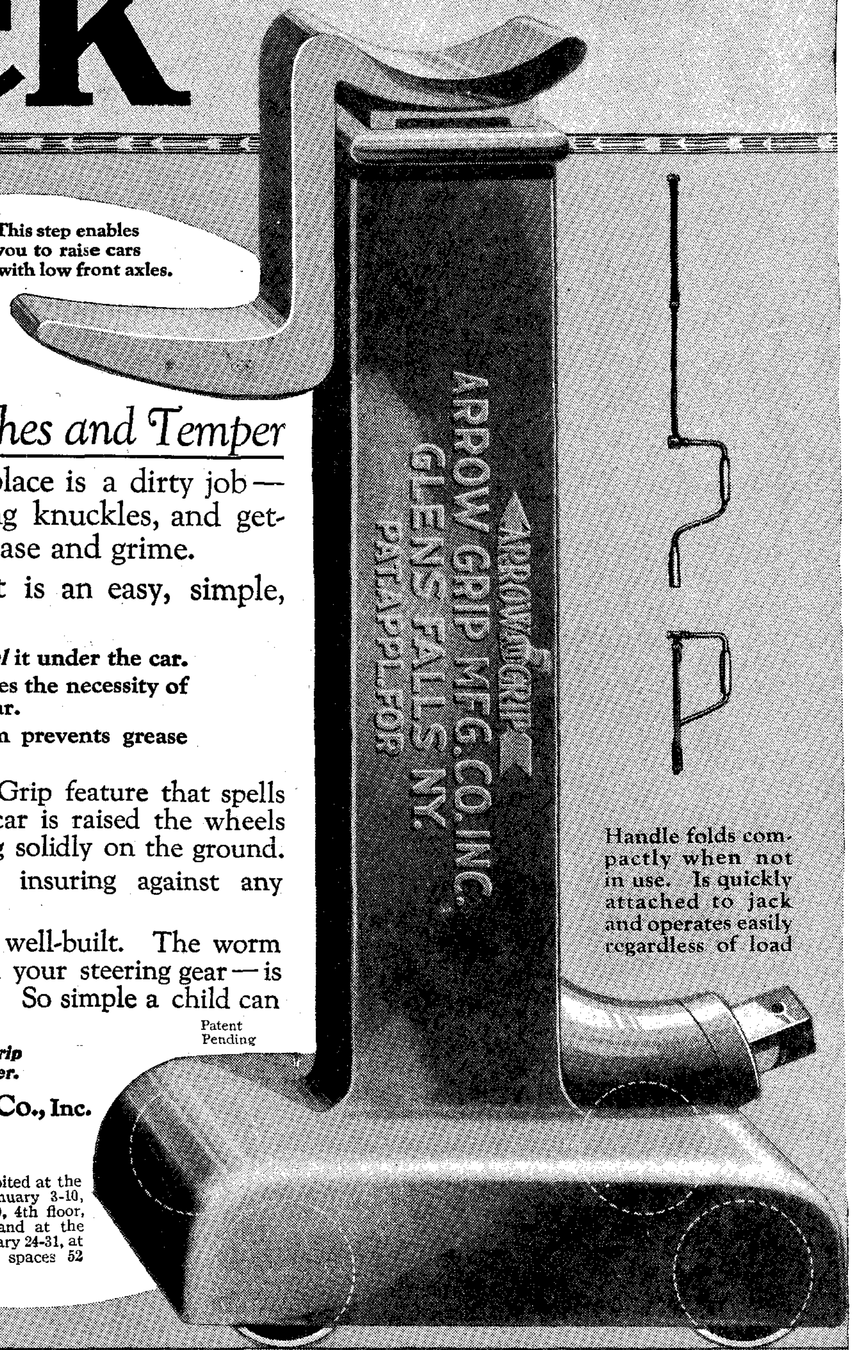
THE ARTICLE entitled "What the Steel-Strikers Think of the Police," which appeared in the November 22d number of THE DIGEST, had the good fortune to draw from a most authoritative source a statement on strike matters as they appear to the department of Pennsylvania State Police, whose representatives the strikers commonly call "Cossacks." George F. Lumb, acting superintendent of this "only non-political police force of its kind in the United States," presents the attitude of his department and its representatives in a way which, as he says, "may throw light on the general charges that have been made in this article and in other periodicals against the State Police force." By way of showing that the policing of strikes, which has earned the term of "Cossack" for the State policemen, is but a small part of their professional duty, he mentions that during the year 1918 not one arrest "grew out of a labor disturbance or a strike." In this time the small force of State Police, consisting of less than 415 officers and men, all told, made 10,017 arrests in the State of Pennsylvania, the charges "including everything from murder and highway robbery to simple assault." A great confusion of identity concerning deputy sheriffs, coal and iron police, and State Police makes it difficult, he points out, for the generally ignorant and illiterate foreigners to see anything but "bulls" and enemies in any upholder of the laws. Another consideration, he says, is the fact that—

> There is a vital difference between radical labor-leaders and the rank and file of the Union men, who, throughout the entire State of Pennsylvania, have no other means of protection from the assassin, the assailant of their women-folk, or the burglars who attempt to rob their homes at night than the Pennsylvania State Police, excepting, of course, in the incorporated cities and boroughs where a local force exists. Radical leaders have said that Pennsylvania is being Prussianized by the "Cossacks"; but, if one may tolerate the mixing of metaphors, it should be pointed out that while there are more than eight

ARROW GRIP

REG. U.S. PAT. OFF.

JACK


ARROW GRIP
ARROW GRIP MFG.CO.INC.
GLENS FALLS N.Y.
PAT.APPL.FOR

This step enables you to raise cars with low front axles.

The Roller Base

Saves Time, Clothes and Temper

Getting the ordinary jack in place is a dirty job—crawling under the car, skinning knuckles, and getting hands and clothes full of grease and grime.

But with the Arrow Grip Jack it is an easy, simple, clean operation—

The roller base enables you to *wheel* it under the car.

The long extension handle eliminates the necessity of stooping or getting under the car.

The completely encased mechanism prevents grease getting on hands and clothes.

The roller base is an exclusive Arrow Grip feature that spells freedom from jack troubles. As the car is raised the wheels compress into the base, the jack resting solidly on the ground. Balance is concentrated in the base, insuring against any danger of toppling over.

The Arrow Grip Jack is husky and well-built. The worm and nut type—the same as used in your steering gear—is its method of raising and lowering. So simple a child can operate it.

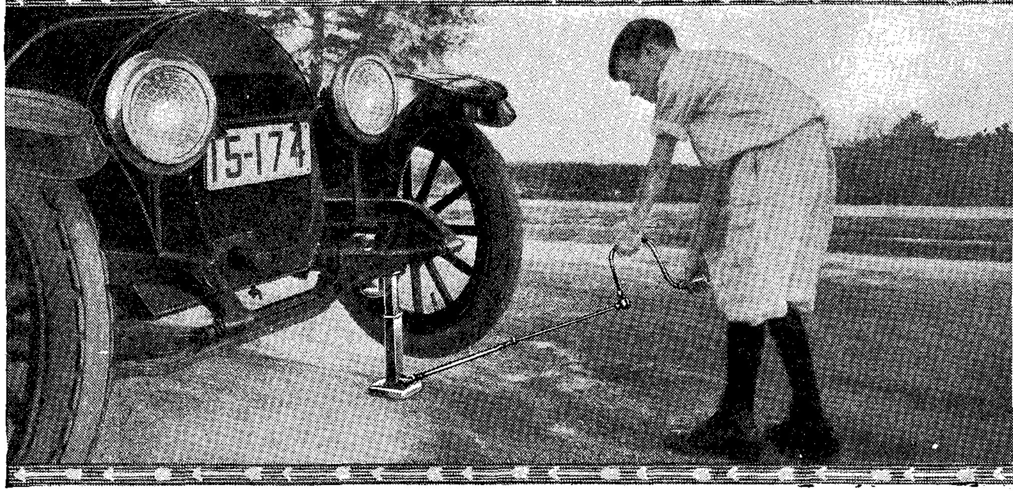
Patent Pending

Ask your dealer for the Arrow Grip Jack or write for descriptive folder.

Arrow Grip Manufacturing Co., Inc.
Department L
GLENS FALLS, N. Y.

The Arrow Grip Jack will be exhibited at the N. Y. Automobile Show, January 3-10, passenger car section, D-140, 4th floor, Grand Central Palace; and at the Chicago Show, January 24-31, at the Coliseum, spaces 52 and 53.

Handle folds compactly when not in use. Is quickly attached to jack and operates easily regardless of load



No contact with greasy parts to soil hands and clothes.

Personally

million people in the sovereign State of Pennsylvania, the maximum number of State Police allowed by law is 415 officers and men. This full number of the force has never been reached because of the inadequate salaries paid, which make it impossible to keep men who are constantly being offered better-salaried positions by private individuals and corporations, as soon as the high caliber of the officers comes to the notice of those desiring such men. Four hundred and fifteen officers and men cover sixty-seven counties embracing an area of forty-five thousand square miles.

A form of relation between the State Police and the miners not frequently dwelt on by radical labor-leaders is given in the following paragraph and letter:

> During the influenza epidemic which swept the "patches" of foreign homes in the coal and steel districts, the State Police worked day and night caring for the sick and the dead among the lowly foreigners. Undertakers were arrested who refused to take care of the bodies of those without funds. The men acted as nurses, ambulance-drivers, and pall-bearers, eight of them paying the penalty for their overwork and exposure with their lives. A letter from Captain Cook, of the United States Medical Corps, on this subject is characteristic of many such received. He writes under date of October 22, 1918:
>
> I am taking these means, in the absence of better, of addressing you regarding the Pennsylvania State Police and their efficiency in handling a most trying and deplorable situation in Minersville during the last ten days.
>
> I arrived here the evening of October 11 and found the town terror-stricken and the populace in a panicky state. It, of course, was quite a task to get them quieted, and I can not commend your department too highly for their able assistance and masterly handling of the situation. They were on the job day and night, and, under the command of your most competent Capt. W. C. Price, who has himself been untiring in his efforts, have succeeded in causing peace and quiet to again come to this little mining-town. I can not offer anything either as a civilian or a soldier to improve the workings or the efficiency of your wonderful organization, excepting possibly that there should be more men for a territory as large as Pennsylvania. More power to you and yours.
>
> Most cordially,
> C. W. Cook,
> Captain M. C. U. S. A.,
> In charge Medical Service of Minersville.

Labor-leaders have accused the State Police of quartering on corporation property and putting their horses in company stables. This has been made necessary in every instance by local agitators, declares the writer, who went to the hotels and livery stables and threatened to drive the proprietors out of business if they accommodated the "Cossacks." He continues, taking up an incident involving an alleged insult to the flag, mentioned in several radical periodicals:

> Every member of the State Police Force is a citizen of the United States, and more than 95 per cent. of the men are honorably discharged from the United States Army, to veterans of which preference is given. Since the armistice was signed there have been no enlistments made excepting of overseas men. These are the heroes that are accused of tearing up the American flag and saying, "to hell with it." At this point I submit the affidavit of the Burgess of Clairton and Fred Young, his Chief of Police, together with the affidavits of eye-witnesses to the incident, who would have no motive in defending our officers, who were temporary strangers in their midst.

The affidavit by W. B. Farnsworth, Burgess of Clairton, deals with the general conduct of the police and with the need for them in the unsettled state of the community. It reads in part as follows:

> The people who are in this community are largely foreign-born, of various nationalities, and during the industrial unrest of the last few months have been very hard to control. The necessity for the troop of your Constabulary became very evident, and an application was made for the same. Immediately upon their appearance upon the scene things began to change for the better, and very little trouble was experienced.
>
> However, in the last few weeks, due to the efforts to unionize our people, disturbances have been very frequent, and threats of these people against the lives of those who had opposite views and of their families continually terrorized our community. It came to such a state of affairs that the various burgesses of the communities above mentioned and the sheriff of Allegheny County prohibited any public meetings until the situation could be clarified. Contrary, however, to these proclamations, a mass-meeting was held in the Borough of North Clairton, on Sunday, September 21, at which a crowd estimated at between two thousand five hundred to three thousand people congregated, and refused to disperse upon the demand of the burgess. The State Constabulary stept in and dispersed the crowd with little or no damage or injury. This was accomplished while brick and stone were being thrown, and the crowd was shooting upon them, but in a few moments order again prevailed.
>
> I want to congratulate you upon the good work done by these men. I will state further that I consider it absolutely necessary that these men, or men similar in character, shall remain in this vicinity until the communities calm down to normal state.

The affidavit of Chief of Police Fred Young, of Clairton, deals specifically with the reported outrage on the American flag by members of the State Constabulary. He testifies in part:

> There has come to my attention a rumor relative to a supposed desecration of the American flag at a meeting called by labor agitators, Sunday, September 21, 1919, at North Clairton, Allegheny County, Pa., which I know to be untrue, as I was an eye-witness of the breaking up of this meeting.
>
> Knowing that this false rumor, if allowed to go unrefuted, might prove detrimental to the character of the members of the State Constabulary, I wish to advise as follows:
>
> I saw the flag and the sapling to which it was attached knocked down from the platform by a heavy-set man who was one of the speakers at this unlawful meeting. The flag was evidently knocked down by this man in his haste to leave the platform. I, myself, cut the twine with which this flag was attached to the sapling, folded the flag, and handed it to its owner, Pat Brogan, by name. The flag was *not* torn, had not been tramped on, neither was it soiled. The above-mentioned Mr. Brogan was arrested and had the flag in his possession at the time. He was not struck by any one, neither was the flag molested. Mr. Brogan retained the flag while being taken to jail.
>
> Desiring that the truth be known, I have made the above statement.

Similar testimony is borne by H. H. Hughes, of the Carnegie Steel Company. His sworn statement, dated October 2, 1919, runs:

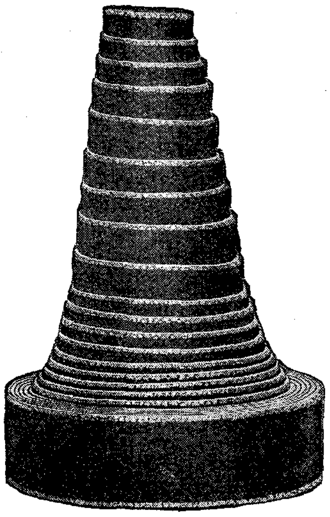
> Your informant is a resident of Elizabeth, Pa., is employed as master mechanic at the Clairton By-Product Coke Works, Clairton, Pa., and was present at a meeting held by the organizers of the Iron and Steel Workers' Association, on a vacant piece of property near the Wabash Railroad in North Clairton, on Sunday, September 21, about two-thirty or three o'clock. Your informant was seated in an automobile approximately forty feet from the speaker's platform.
>
> The first speaker addrest the gathering, which I would say was approximately between fifteen hundred and twenty-five hundred people. The first speaker spoke first in English and next in Italian. The second speaker had just begun speaking, and was addressing the gathering in English when five State Troopers, mounted, rode into the crowd, made their way to the speakers' platform, and placed the speakers under arrest. On one corner of the platform an American flag was fastened to a light pole approximately ten feet above the platform. One of the speakers, hurriedly leaving the platform, dislodged pole and flag to the ground. This flag was picked up by the Chief of Police of Clairton, Pa., and handed to Mr. Patrick Brogan who is secretary of the local union.
>
> The dispersing of this crowd was very effectively done, and there was no undue force or brutal disregard of the rights of any one, as this meeting was a direct violation of the proclamation of the sheriff of Allegheny County and of the three burgesses of Wilson, North Clairton, and Clairton. There was a number of shots fired, but your informant did not see who fired them.

Several other affidavits from eye-witnesses, all to the same general effect, are enclosed. The writer objects that too many of the articles criticizing the actions of the Constabulary are founded upon mere hearsay, or report as facts charges made by unreliable, excitable people who can with difficulty make themselves understood. The writer takes up also the somewhat dramatic case of the appearance of a bullet in the government inquiry before the Senate in Washington. This bullet, which had narrowly missed a housewife's head during night firing at Clairton, was identified by a former soldier as the jacketed steel projectile used only in government automatics, a possible in-

"When I buy brake lining—

I look for substantial wear. **You can** gamble with tires if you wish, or oil or spark plugs, but you can't take chances with the brakes. You know how it is. Once in a while the other fellow does the unexpected or a kid runs across the road and by George, if you don't stop quickly, something happens. That's why I'm fussy about my brakes. I used to buy any lining the garage man had. Thought they were all the same. I've learned a lesson. Now, I buy Raybestos. It's guaranteed to wear one year—no matter how far you travel, and believe me it WEARS. If you like to feel the brakes grip when you press the pedal—line 'em with Raybestos."

Raybestos
BRAKE LINING



Experienced motorists realize the importance of *good* brakes. That is the reason for the popularity of Raybestos. There are substitutes. Avoid them. When you ask for Raybestos, look for the Silver Edge.

The Raybestos Company Bridgeport Conn.

Up-to-Date—

and Ends Winter Makeshifts

A makeshift is at best *only a makeshift*—

HARRISON HEXAGON

Blankets—a piece of card board over part of the radiator core—radiator hood covers—and other makeshift methods are all typical of winter driving with the average car.

On a car equipped with a Harrison Shutter Radiator, automatically controlled, the motor is automatically maintained at a uniform temperature when driving. After stopping the car, before the motor gets cold, the shutters close automatically—retaining the heat of the engine within the hood.

Maximum engine efficiency when driving—with shutters closed and motor protected when stopped—winter driving is indeed a pleasure if your car is equipped with a Harrison Shutter-Controlled Hexagon Radiator.

Harrison Radiator Corporation

General Sales Offices:
Detroit, Mich.

General Offices and Factory:
Lockport, New York

HARRISON *Shutter-Controlled Hexagon* **Radiators**

ference being that it had been fired by some member of the police. The State Police, however, Superintendent Lumb points out, are armed with .38 caliber revolvers carrying a lead bullet. "So what," he asks, "has this to do with the steel-strikers' opinion of the State Police?" He takes up the case of the strikers as opposed to the State Police on other points:

> The shop-worn recitals of brutality to pale, wan-faced women and toddling children have been going on for fifteen years, but the remarkable fact remains that when it comes to a show-down they never produce the man with the broken skull, the trampled woman, or the maimed child, but indulge in these vague generalities often covered by affidavits which, not having been made in a court of record or before a lawfully constituted commission, can not be prosecuted as perjury. The writer confronted these people before the United States Commission on Industrial Relations held under the chairmanship of Frank P. Walsh in Washington in 1915, where a farcical hearing was held by a commission that had no power to administer oaths—at least so the chairman informed the writer. At that hearing affidavits from judges and responsible citizens were introduced in evidence rebutting charges against the State Police, which affidavits we were asked to leave with the commission, in order that they might be copied into the records, with the assurance that they would be returned to us to be filed in the archives of this department, where they belong. These affidavits were never returned, and after repeated requests the matter was taken up with a United States Senator, who, after considerable investigation, informed us that they were not with the records of the United States Commission on Industrial Relations. At Albany, New York, before the Senate Finance Committee and at Columbus, Ohio, before the State Senate a large number of radical agitators took up hours of time in denouncing and abusing the Pennsylvania State Police Force, but in only one instance did they specify, and that was the recital of the trial of Trooper Moughan, charged with murdering one Zambo at Bethlehem in 1910.
>
> Moughan was alone on a crowded street keeping open the traffic, being jeered at and stoned by mobs from either side. Finally shots were fired at him from a house, when he drew his revolver and fired two shots in the air, which was a prearranged signal for assistance. At about that time Zambo, a foreigner, fell dead in the doorway of a saloon and Moughan was accused of having shot him. He was tried by a jury picked in a hotbed of unionism in Northampton County after having been indicted for murder. This much of the story was recited before the Senate of Ohio by a labor-leader who read from the record which he held in his hand, and at this point he stopt reading, saying: "Now, that I have shown you this trooper was tried for murder, I must turn to something else." And at the very moment he made this attack he had before him the rest of the record which showed that the trooper was acquitted because Zambo was killed by a .32 caliber bullet, evidently fired by a strike sympathizer from the other side of the street who had aimed at the trooper, and that the only firearm that the trooper had was his .38 army Colt. This incident is cited to show the injustice and falseness of these miserable attacks that are being made against a fearless body of officers of the law, who are red-blooded Americans to a man, who have served under the flag and can not be bribed or bluffed.
>
> Such charges are not an indictment of the Pennsylvania State Police Force, but they are an indictment of the intelligence of every judge and every district attorney and every member of the legislature of the State of Pennsylvania, in that the conditions described could not have existed for fifteen years without the sanction and will of the people who have so recognized the value of the State Police Force that it was increased from 228 men to 330 men with an increase in salary in 1917, and again increased to 415 officers and men with another increase in salary by the legislature of 1919.
>
> It may be said, in conclusion, that it is the consensus of opinion of the Governor of Pennsylvania, the Attorney-General, and the writer, that had there been no State Police in Pennsylvania when the steel strike started in the western part of the State there would have been hundreds of lives lost, millions of dollars' worth of property destroyed, and a revolution started, which, once successful in the highly organized centers of Pennsylvania, would spread like wildfire throughout the land.

Superintendent Lumb's contention that opinions held of the State Police among radical labor-leaders differ widely from those held by more conservative workers seems to be upheld in part by a letter from H. M. Hays, of Butler, Pa. Mr. Hays, it appears, is employed in some capacity about the steel-works, altho he does not mention his position. He presents a statement which he calls "What the Steel-Workers Think of the Police." It runs, in part:

> The article in this week's issue of The Digest, entitled "What the Strikers Think of the Police," would leave an unfavorable impression upon those people who are not familiar with the work of this magnificent organization. I have for eight years been located in a city where a troop of the Pennsylvania State Constabulary has its barracks, and during that time have had occasion to witness its work and methods, both at close range and from a distance, and I can truthfully state that during all that time I have never seen any indication of "lawlessness" on their part. Rather, it is a not infrequent thing to hear (from law-abiding citizens) high praise of the men, their noninterference in affairs that are "none of their business," and repeatedly the statement is made by people coming here from other communities: "I am surprized to see the caliber of the men who compose your State Constabulary. One can readily tell, if only from the clean-cut faces, that these men are not 'rough-necks,' and that many of them are of considerably more than average intelligence." It would be unreasonable to expect that out of an organization of several hundred men there would not be some "below par," but in this case the percentage is negligible.
>
> The men are stern and unhesitating in the enforcement of the law, and I think any unprejudiced, law-abiding citizen living in present strike districts who has seen the way this strike is being conducted will agree that only forceful measures are of any avail. The statement quoted in The Digest, that "those riot-sticks have yet to be used in a riot," is the finest tribute that can be paid to the efficiency of the Constabulary, for prevention is their "long suit," and where other agencies are almost forced to wait until a crowd has gathered before taking any action, it is the trooper's duty (and he performs it well) to prevent riots, not to break them up.
>
> On the first morning of the strike I started for work as usual. Before arriving at the nearest "gate," I encountered hundreds of foreign workmen drawn up in regular formation from curb to curb and over the sidewalks, six or eight ranks deep, preventing the passage of vehicles and pedestrians, not only to the plant, but to the public streets beyond. After a time, several of us succeeded in skirting this mob and took another course toward a different entrance to the works. On this street we found railroad-ties piled up from curb to curb and foreign men and women armed with clubs, pieces of sucker-rod, baseball-bats, etc. (a dozen of which I personally gathered up after order was restored, and am still holding) were turning back all who approached. Street-car crews were informed that if they again brought their cars within the proscribed area they would be taken from their cars and beaten. I saw men who wanted to go to work chased by these people and, in one case, stoned. I saw the sides of an automobile battered in, I know of an automobile radiator destroyed, and of other numerous acts of violence. And these acts were being performed by "these simple people," as Mr. Olds chose to call them. He also speaks of "A little woman, . . . just a wife and mother of three children." I saw such a one that morning, one who was very evidently soon again to become a mother, with her smallest baby in her left arm and a club in her right, cursing profusely because she failed to strike a loyal American workman at whom she had aimed a blow. And his only offense had been that he wanted to get to work. During a period of excitement when the pickets were swooping down upon a newcomer, myself and two others managed to pass unseen. The next mob we came upon was formed outside the plant's main office. We decided to attempt to walk through, but came face to face with a solid wall of humanity.
>
> "Where you going?" came the first question.
>
> "To work," I answered quietly.
>
> "Like hell you are," came a chorus of shouts. "You don't know we strike here? You no read the papers?"
>
> "Yes."
>
> "Then why in hell you come here? Go home. We don't want no trouble [this assurance accompanied by a swinging of clubs], but you no can walk through here."
>
> "But this is a public street," said one of my companions; "we have a right to walk here."
>
> "You got union-card?" came from another husky picket, with a club in one hand and a fluttering American flag in the other.
>
> "We haven't. Is this street only for the use of men with union-cards?"
>
> "Sure," came back like a pistol-shot. "Only for union-men."
>
> It was difficult to stand the abuse and curses that were heaped upon us by "these simple people." Things were commencing to look bad for us, voices getting louder, looks and actions more menacing, when a young foreigner who had been standing un-

> observed on the opposite curb and taking no part in the demonstration, walked warily to my side. Instantly, I recognized him as a former member of one of the English classes I had taught at nights in the foreign settlement. He whispered: "For your own good, you'd better move. Go up on the grass on the other side, and they'll let you alone. The women are coming down the street, and God only knows what they'll do. You don't want to have to run from women." We unhesitatingly took his advice. And very soon the women came, a dozen of them—howling, clubs waving, "seeking whom they might devour."
>
> I could give details of dozens of instances showing that Mr. Olds's description of "witnesses to brutality, to intimidation, to lawlessness, to denial of the ordinary rights of men," applied to no one so much as to those who have witnessed the actions of the strikers, instead of the police, but I do not wish to write a book.

The city and country authorities did their best to handle the situation with city police, the sheriff, and his deputies, says the writer, and for several days the mill district was in a turmoil. The climax came when a mob charged the sheriff and threatened to do him bodily injury when he was arresting a culprit. To quote further:

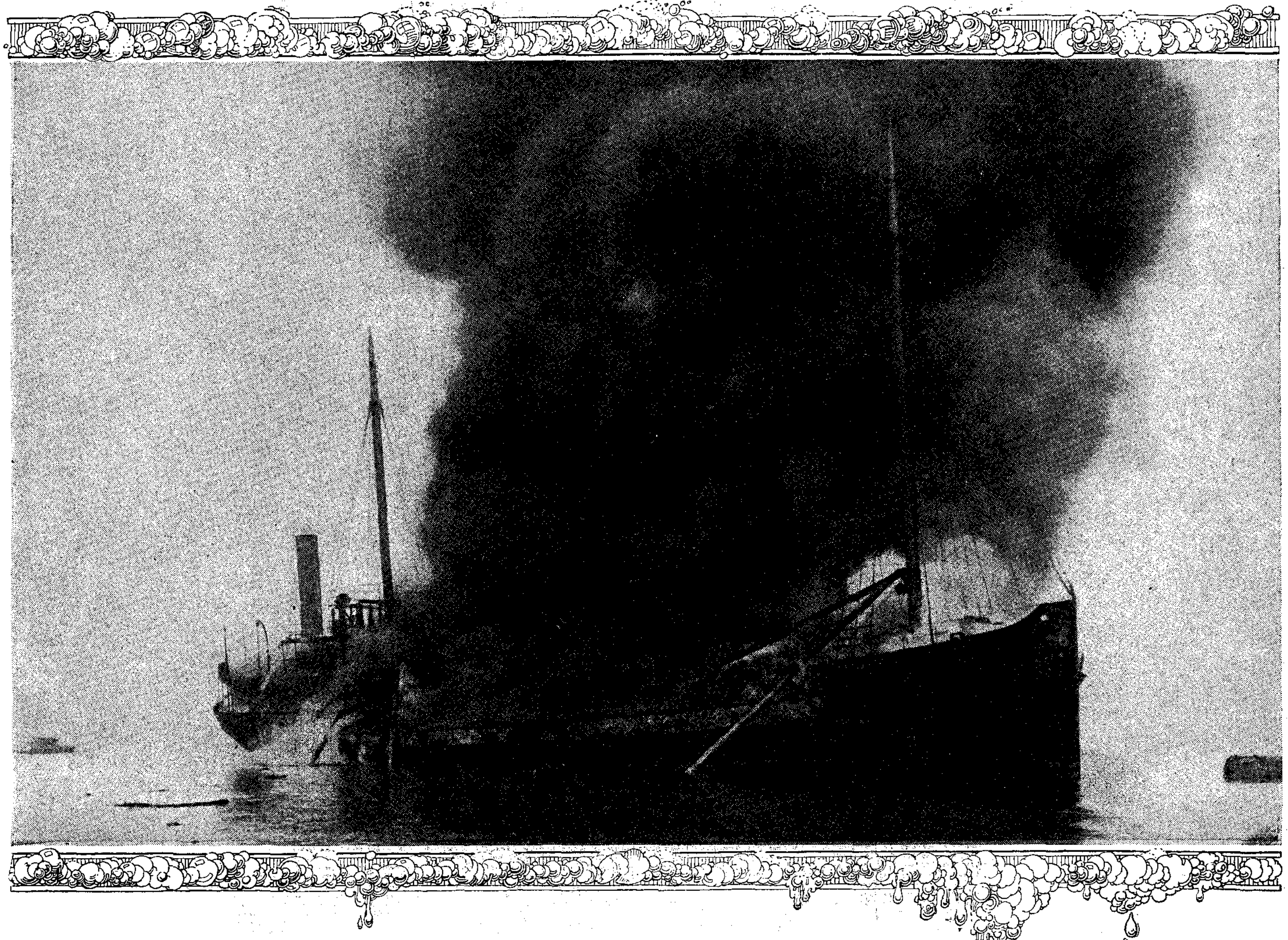
> Drawing his revolver to keep them at bay, he attempted to reason with them, but might as well have talked to the beasts of the jungle. He then threatened to call out the State Police. The mob's answer was a shower of missiles—a brick through the windshield of the sheriff's automobile. This followed an address by one of the organizers in which he told the men they must "fight for their rights." Well, the State troopers were then called out, and since that time Mr. Olds's comparison of "some cheap summer resort on a rainy day" would be quite fitting, for "law and order" have held sway, and there is not a shadow of doubt but that they will continue to, just so long as the State Constabulary is "on the job."

THE AMERICAN "REPUBLIC OF JONES" OF 1864

THE GREAT WAR has called into existence a number of small nations, just as the Civil War gave birth to the now practically forgotten "Republic of Jones." The nations newly born in the great conflict promise to survive, with the aid of their older and larger brothers, while the Republic of Jones died with the war of 1861–65. The records of the small American country are concealed in one of the forsaken byways of history. Text-books contain no mention of the "republic"; its story must be dug out from letters and newspapers of the Civil-War period, in which references to the Republic of Jones are not numerous. In fact, some writers say that it never existed. They assert that the rebellion in Jones County, Mississippi, never went far enough to take the form and attain the dignity of actual secession from the State. A writer in the New York *Evening Sun* dissents from this view, declaring that—

> The Republic of Jones did exist and did maintain its existence as a free and independent nation. It was a full-fledged republic in the years 1862–65. It had a president, a cabinet, two houses of congress, an army, and a commander-in-chief. Being an inland republic, like Bolivia and Switzerland, it had no navy and no need for one.
>
> The Republic of Jones lasted just as long as did the Confederate States of America. When the greater Civil War ended the smaller war of the Republic of Jones with the State of Mississippi and with the Confederate States of America ended also. Ultimately Mississippi went back into the Union and Jones went back into Mississippi. There was a reconstruction period for the State and also for the county.
>
> Jefferson Davis was the only President of the Confederate States of America and Nathan Knight was the first and only President of the Republic of Jones. Knight, who was known through Jones as "Nate," was a man of bravery and determination, a good fighter and popular. He was prominent in the affairs of Jones even before it seceded from the State.
>
> Just as the North fought hard to bring the seceding States back into the Union, so Mississippi—perhaps somewhat inconsistently—fought to keep the County of Jones, or the Republic of Jones, in the State.
>
> In the efforts of Mississippi to put down the rebellion in Jones the State received aid from the rest of the Confederacy—that is, Mississippi received such aid when the Confederate leaders found time among their numerous other worries to give thought to the little "rebellion within a rebellion."
>
> Knight and his followers fought hard against the efforts to bring them back within the State. In the main their fight was successful. It was not until after Lee surrendered and the Confederacy collapsed that the Republic of Jones capitulated to the State of Mississippi.
>
> When the news of the fall of the Confederacy reached Jones the Jonesites had the good sense to realize that the cause of their little republic was hopeless. Knight gave up his office and advised his subordinates to resign. He went back to his farm and the others also dispersed to their homes.
>
> For years after the war Knight and his principal supporters had to keep quiet and secluded. Relatives of men killed in the fighting between the Republic of Jones and the State of Mississippi sought vengeance on the men who had been active in the affairs of the little republic. There had been much bloodshed.
>
> Sometimes considerable forces were sent by Confederate leaders against the men of Jones. One estimate, or guess, placed the number of Jones's soldiers in the field at one time as high as 10,000, but that is undoubtedly a gross exaggeration, since the population of Jones in 1860 was, according to the United States Census, only 3,323, of whom 1,492 were white males. At times, however, the army of the Republic of Jones was augmented by deserters from the Confederate forces and fugitives from the Confederate draft.
>
> It was in the latter part of 1862 that Jones seceded from the State of Mississippi and decided to "go it alone" as "The Jones County Confederacy." Just why Jones cut loose from the mother State is not known, but it is believed that it did not approve of Mississippi's leaving the Union.
>
> After the congress of the Republic of Jones was organized some of its members wanted the new-born nation to enter into an offensive and defensive alliance with the United States of America. But that project fell through, and the great majority of the people of the Northern States never even heard of the little Southern republic. Of course, the independence of the Republic of Jones was never recognized by the Confederate States of America.
>
> Some few folk in the North heard vaguely of Jones, but in the stress of the Civil War they paid little attention to it. On August 1, 1864, the New York *Tribune* quoted the following from the New Orleans *Picayune* of July 17, 1864, under the heading, "The Republic of Jones":
>
> "The county of Jones, in the State of Mississippi, through which the Leaf River and the Tallahala run without bringing much fertility with them, is known for the poverty of its soil and the independence of its people. In our younger days it was called the 'Free State of Jones,' from the absence of any 'human chattels' or any other property restraints upon its people. They were wholly indifferent to the judgments of the courts, for they had no jail, except a hog-pen, without a lock to its door or a roof upon it, and as for pecuniary penalties, they defied them.
>
> "We heard last year indeed that Jones had seceded from the Confederacy and that they had quite a force guarding their territory against all incursion. We had supposed that by this time they had been reduced to terms, but learn that the republic still maintains its independence."
>
> Jones was then—and still is—somewhat secluded, which helps to account for the fact that it was able to hold out for years against the State of Mississippi and the Confederacy. There was no newspaper in Jones in the Civil War period. Paper of all sorts was scarce—so scarce, in fact, that often when the officials of the Republic of Jones wanted to issue a proclamation they had to write copies on birch bark and pin them on trees.
>
> In 1865 the Confederacy died, and so did the Republic of Jones. Some of the Jonesites did not approve of the part the county had played in the great war. Just as there were some Union men in the Confederate States, so some of the men of Jones opposed secession from the State.
>
> In 1865 they petitioned the legislature to change the name of the county so that it might be "so completely sunk out of sight that the hand of Time might never resurrect it." They wanted the county renamed Davis, in honor of Jefferson Davis, who was a Mississippian. The State, however, was then in the hands of the reconstructionists, who detested the name of Davis.
>
> After a very brief existence as the County of Davis, the ex-Republic of Jones went back to its old name, and to this day it remains the County of Jones, the only one in the United States which was once a full-fledged republic.
>
> Ellisville is the county-seat now, and was the capital of the republic.

(Photograph Courtesy by Underwood & Underwood)



This must stop!

THIS oil tanker perished by the flame. Heretofore, when a ship caught fire at sea, nothing in the world could save her once the fire gained headway.

Fire's ghastly toll at sea can now be halted. *Fire*—fire at its worst—has met its master.

Foamite Firefoam, a product of American inventive genius, *smothers fire* on land and sea.

Foamite Firefoam masters fire of *every* type of *every* origin in *every* American industry. It can be applied in any quantity over any area.

Foamite Firefoam is totally different from all other fire-extinguishing agents. It is *fatal* to *fire*.

Foamite Firefoam is a latherlike blanket composed of minute but durable bubbles of carbon dioxide gas. This bubble-blanket is highly adhesive, coating and clinging readily to all burning surfaces—even floating on the most volatile liquids. *It is the only extinguishing agent that readily smothers fire and prevents re-ignition.*

Foamite Firefoam apparatus, approved by the National Board of Fire Underwriters and the United States Steamboat Inspection Service, includes protective systems, both stationary and portable, for every fire hazard.

Danger spots—oils, paints, varnishes, chemicals—are multiplying on every hand, in every industry. Look about you. Look into Foamite Firefoam. For quick action use coupon below.

FOAMITE FIREFOAM CO., 200 Fifth Avenue, New York City

Our own Sales Companies represent us in principal cities

Foamite Firefoam

(COUPON)

FOAMITE FIREFOAM CO., 200 Fifth Avenue, New York City. Let me have full information as to the nature of Foamite Firefoam together with illustrations showing its application on fires, and full information regarding various types of apparatus.

Name of firm .... *Individual* ....

Address ....

L 150

HOW A YOUNG ENGLISH ARCHEOLOGIST CAPTURED DAMASCUS

THE war found Thomas E. Lawrence "pottering about the Euphrates studying archeology and Arabic"; it left him "Prince of Mekka," and additionally notable, in the opinion of one authority at least, as "the most surprizing and romantic figure of the war on all fronts." In an account entitled "The Amazing Story of Lawrence of the Hejaz," the London *Graphic* tells of the adventures of this young Oxford man. Tho it is said Lawrence was "entirely ignorant of military art," some general of the British Army operating in the Near East resolved to use him in the service on account of his extensive knowledge of the Arabs and their country. So it came to pass that Lawrence, who had been made a lieutenant-colonel, led the Arabian troops who put the Turks to rout before Damascus and were the first of the Allied forces to enter that ancient city. Here Lawrence assumed control of the situation, dissolved the provisional civil administration, and appointed a Military Governor. After the signing of the armistice Lawrence was selected as a delegate to represent the Arabs at the Peace Conference in Paris, where he appeared in "Arab dress, a flowing *keffieh* encircling his un-Arabic blond head." Even here adventure followed the young man. We are told that one day in Paris he suddenly recalled some papers bearing upon the Syrian situation which he had left behind in Egypt. The Peace Treaty was about to be signed and there wasn't time to secure the papers by the ordinary means of transportation. So Lawrence got into a Handley-Page airplane and started to fly to Cairo without loss of time. In Italy the machine crashed to the ground, the young man's two companions were killed, and he himself injured. He continued his trip, however, and in ample time was back in Paris with the precious papers in his possession and his arm in a sling. Lawrence is described as "a small man (five feet three inches in height), beardless, easily passing for a woman in Arab dress." He is said to have an unconquerable aversion to the lime-light, and to be "so careless of appearances that, even when he got into British uniform, he neither knew nor cared how many stars he had on his shoulder-straps." The story of Colonel Lawrence's daring advance upon Damascus is told, in his own words, as follows:

> It was on September 2 (1918) that the fateful day arrived to put my plans into execution for an Arab advance northward to Deraa and Damascus. Our total force was only a thousand strong, but never in history could an Arab force boast such resources. In July General Allenby had sent two thousand camels to the Hejaz. Out of these we were able to form a camel corps of 450 drivers. We had four Arab Vickers machine guns, twenty Arab Hotchkiss guns, a French battery of four mountain quick-firing guns, two British airplanes, three British armored cars, a demolition company of the Egyptian Camel Corps, and a section of Ghurka camel-drivers. Moreover, my colleague in arms, Sherif Nasir, and myself and our own private bodyguard of Arabs.
>
> We had planned every detail carefully for our great adventure, and were so confident of success that we made no provision for getting our force back again in case of defeat. In any case, we would have been unable to do so. As it turned out, we lived from hand to mouth. The supply problem, especially petrol, gave us many anxious moments.
>
> Our force was timed to concentrate at Azrak, 290 miles distant from us, on September 12. There we planned to collect the Rualla tribesmen and to descend in full strength on the Hauran, with a direct assault on Deraa, which we had good reason for believing was held by only five hundred Turks.

The Arab forces met at Azrak, according to schedule, but Colonel Lawrence himself was unable to get away from his headquarters at Ab-el-Lissam for some days, being detained by a quarrel among the tribesmen, which was finally adjusted through his mediation. This made a modification of the original plans necessary, and hence—

> At Azrak we had a council of war, and decided to carry out a flying attack on the northern, western, and southern railways at Deraa with our regular troops, some Rualla horse under Khalid and Trad Shaalan, and as many Hauran peasantry as would be brave enough to declare for us.
>
> While the Turk was busy guessing at what we proposed to do, we pushed off from Azrak on the 13th, marching over the long Gian-el-Khunna into the basalt desert of Jebel Druse. The Egyptian and Ghurka units were sent westward to cut the Amman line by Mafrak, but owing to a misunderstanding with their guides they never reached their objective. But we were not without consolation, for on that day our plucky *Bristol* fighter brought down a German two-seater in flames near Umm-el-Jimal. We got to Umtaiye, thirteen miles southeast of Deraa, on the 15th. We were immediately joined by the male population of the nearest villages. Chief among those who came was Sheik Talal-el-Hareidhin, of Tafas, the finest fighter of the region of Hauran.

Colonel Lawrence had met this sheik before and the two were good friends. The sheik offered to guide the expedition, and the Englishman credits the Arabian chieftain largely with the success of the enterprise. The units that had been sent to cut the Amman railroad line had failed, and so this task still remained to be done in order to prevent reenforcement of the enemy from the south. The account proceeds:

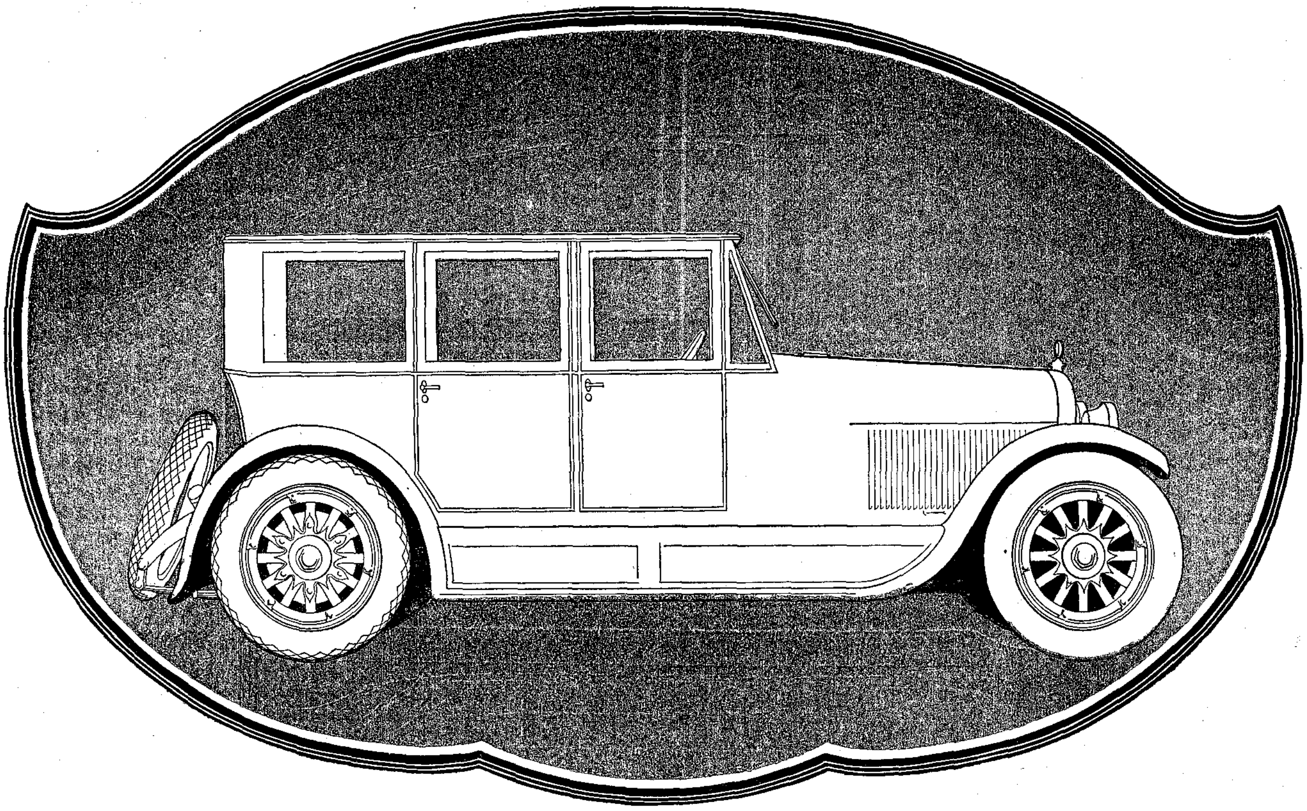
> The only unit now in hand to do this cutting was the cars. Going down to the railway, we came upon a post of Turks standing about open-mouthed in astonishment, and captured them before they realized we were hostile. This post commanded a four-arched bridge about twenty-five meters long, which we blew up, along with the station, and near Tell Erar, five miles north of Deraa, other sections of the railway were destroyed.
>
> While this demolition was going on, we climbed to the top of Tell Erar, and perceived nine enemy machines in the aerodrome at Deraa. As our *Bristol* had been badly knocked about, they had no competition to fear, and for a time did what they liked with bombs and machine guns. We used our mountain guns and Hotchkiss for all they were worth, but even with luck on our side we were decidedly getting the worst of it, when our only surviving machine—a *B. E. 12*—from Azrak turned up. It sailed pluckily right into the middle of the show. We watched it with very mixed feelings, for the four Turkish two-seaters and their four scouts were a pretty lot to tackle single-handed. However, by good hap or skill the *B.E.* came through them and led the whole circus away westward and on to Ghazale in pursuit, while we took advantage of our respite to organize and send off a mixed column to Mezerib to cut the Palestine line there.
>
> We had just done this when the *B.E.* flew back again with its attendant enemy swarm, signaling that it had finished its petrol. It landed quite near us, turning over on its back in the rough, while a Halberstadt came down and scored a direct hit on it with a bomb. All the same, our pilot was unhurt, and in an incredibly short space of time, with his Lewis gun and tracer bullets, was running about in a Ford car just outside the town, cutting the railway to prevent any kind of sortie of rolling stock.
>
> Meanwhile, at 1 P.M., I had repaired with a party to the lake of Mezerib, and in an hour had taken and dismantled the French station. But the main station on the Palestine line was a more difficult job, and we waited until 3 P.M., for the camel corps and guns to arrive, when we attacked it formally and carried it by assault. We cleared the station, broke the points and planted a fair assortment of "tulips" (method of cutting a line) down the line.

The advance continued in spite of resistance at various points. Near Umataiye the Lawrence forces were attacked with bombs from airplanes, but escaped without injury after destroying one of the machines. Colonel Lawrence's next move was to send a cavalry charge against the Fourth Turkish Army, which was forced to retreat after heavy casualties. Then he prepared to descend on Deraa—

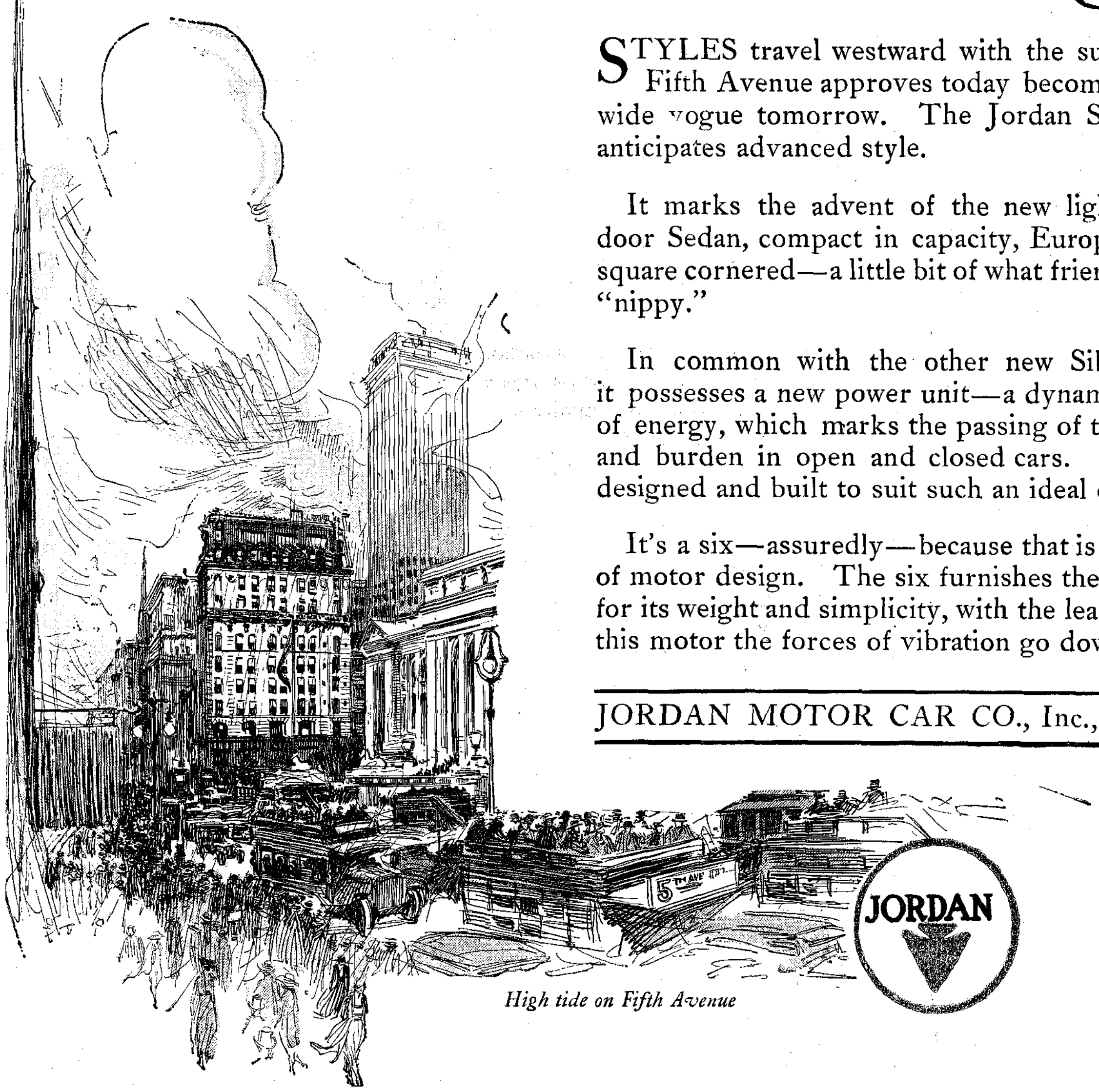
> Meanwhile the Turks received fantastic reports of our strength, and ordered the immediate evacuation of Deraa by road, while the Germans burned their five remaining airplanes, which gave a total of eleven enemy machines to our credit since September 13. At dawn on the 27th we reached Sheik Saad in time to take prisoner two Austro-Turk machine-gun companies on their way to El Kuneitra to oppose the British advancing by that road.

Then a message was received that two forces of Turks were advancing against them, one of six thousand from Deraa and one of two thousand from Mezerib—

> We decided that the Mezerib crowd was about our size, and so marched the regulars out to meet it just north of Tafas, while sending our Hauran horse out to hang on to the skirts of the large column and some mounted peasants to secure the Tel-el-Shehab bridge, which the Turks were mining. Having to fight an infantry battalion on the way, we were too late



The JORDAN Silhouette Sedan



STYLES travel westward with the sun. That which Fifth Avenue approves today becomes the country-wide vogue tomorrow. The Jordan Silhouette Sedan anticipates advanced style.

It marks the advent of the new light-weight, four-door Sedan, compact in capacity, European in lowness, square cornered—a little bit of what friend England calls "nippy."

In common with the other new Silhouette models it possesses a new power unit—a dynamic, light bundle of energy, which marks the passing of the days of bulk and burden in open and closed cars. A new motor—designed and built to suit such an ideal car.

It's a six—assuredly—because that is the world trend of motor design. The six furnishes the greatest power for its weight and simplicity, with the least vibration. In this motor the forces of vibration go down in defeat.

JORDAN MOTOR CAR CO., Inc., *Cleveland, Ohio*

JORDAN

High tide on Fifth Avenue

> to prevent the Mezerib column getting into Tafas. They strengthened themselves there, and, as at Turaa, the last village they had entered, gave themselves over to the most bestial rapine. When they marched out later we attacked them with all arms, and, as the result, bent the head of their column back toward Tell Erar.
>
> When Sherif Bey, the Turkish commander of the Lancers, saw what we were doing he instantly ordered that all the inhabitants of Tafas should be killed. The victims included some twenty small children and about forty women. I afterward saw one poor expectant mother who had been forced down on a saw bayonet, a dreadful sight.

These horrors were too much for Sheik Talal-el-Hareidhin, who had been acting as Colonel Lawrence's guide. We read:

> Talal was in front with Auda Abu Tayi and myself when we saw those sights. He gave a terrible cry, wrapt his headcloth about his face, put spurs to his horse, and, rocking in the saddle, galloped at full speed into the midst of the retiring column of Turks. He fell, himself and his mare, riddled with bullets, among their lance-points.
>
> It was a dramatic death for a brave, high-spirited warrior, outraged in his feelings by a savage foe. But Talal was amply to be avenged.
>
> With Auda's help we were able to cut the enemy column into three. The third section, with German machine-gunners, resisted magnificently, and managed to get off.
>
> The second and leading portions we wiped out completely, after a fierce struggle. In view of what had happened, we ordered that no prisoners were to be made, and this order was obeyed, except that the reserve company took 250 men (including many German A. S. C.) alive. Later, however, they found one of our men with a fractured thigh, who had been afterward pinned to the ground by German bayonets. This was too much for the Arabs, and the prisoners fell victims of their wrath.
>
> After this episode the Rualla horse were dispatched straight on to Deraa with orders to scatter any Turkish formations they met with on the road and to occupy the town. They had two or three fights on the way down, took Deraa station at a whirlwind gallop, riding over all the trenches and blotting out the enemy infantry that still tried to hold the place. Next morning they brought to Arab headquarters three hundred mule-mounted infantry prisoners and about two hundred infantry and two guns.
>
> But we were uneasy. We did not yet know we had won, since there was always a risk of our being washed away by a great wave of the enemy retreat. I went out in the darkness to see our Haurani horse, near Sheik Miskin, and found them still clinging on to the great Turkish column from Deraa, giving much more than they were getting.

Lawrence's camel corps entered the Deraa at dawn. A day or two afterward occurred the defeat of the Turks before Damascus. The fight is described as having ended in scenes of terrible slaughter, five thousand Turks being killed and eight thousand captured. When Colonel Lawrence counted his spoils he found he had 150 machine guns and from twenty-five to thirty guns. The following morning Colonel Lawrence rode into Damascus. He rode to the Town Hall, where he found Mohammed Said and Abd-el-Kader, who had assumed control of the civil government. He informed these gentlemen that their government was dissolved and that he had appointed Shukri-el-Ayubi Arab Military Governor of the city. Further:

> The pair took the announcement rather badly, became violent, and had to be escorted to their homes. That same evening Abd-el-Kader summoned all his friends and some leading Druses and delivered an impassioned speech, calling upon his hearers to strike a blow for the faith in Damascus. There was some response to this, but long before morning this display of faith and force had degenerated into simple looting. Lawrence's patience became exhausted, and in order to deal promptly with the situation he called out his troops, lined the Serai Square, where the rioters had assembled, with machine guns, and opened fire. There were some twenty casualties, but this was undoubtedly the right method to adopt, for peace was restored in the course of some three hours.
>
> But now the British Army was also at the gates of Damascus, and in a few hours the streets were swarming with English, Scots, and Australian soldiers.
>
> A few days after the taking of Damascus Shukri-el-Ayubi was sent to Beirut to proclaim that city and the Lebanon under Arab rule. All that is another story, whose ending is not yet.

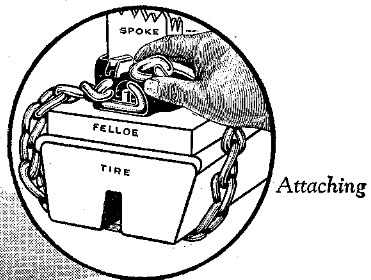
AN INSIDE VIEW OF LIFE IN RUSSIA TO-DAY

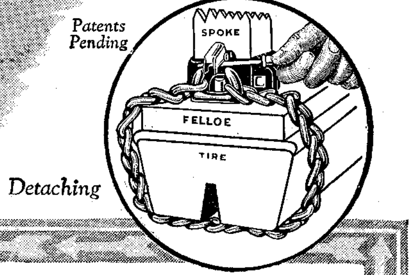
WHAT does Bolshevik Russia look like, viewed from the inside, at this present day? What do the people of the *Soviet* Government think of their rulers, of their political conditions, and of things in general? What is the daily routine of the life of an ordinary citizen of Moscow or Petrograd, provided he so conducts himself as to avoid trouble with the "Red" masters?

In all the reams on reams of discussion during the last two years, writes Bruce Bliven in the New York *Globe*, hardly anybody has succeeded in getting out of the country a real picture of the inside of Russia as Lenine and Trotzky and their supporters have made it over. Russia has been lied about, rhapsodized about, curst, and prayed over. It sometimes seems to the ordinary American citizen as tho all the professional falsifiers in the world had been retained by one side or the other, and were working in twenty-four-hour shifts, "telling us things that aren't true, can't be true, and never were true even in that fantastic country where the impossible is always happening." For these very good reasons, when some one comes along who seems to tell a true tale, from first-hand experience, what he has to say is of unusual importance. To quote Mr. Bliven:

> Such a man, in my judgment, is Paul Dukes, who came out of Russia a few weeks ago and has written in the London *Times* the story of what he found there. Dukes speaks Russian, he confesses, like a native, tho he is of British birth. He had lived in Petrograd when the Bolsheviki were still impractical, back-room "idealists"; he was active in the revolution of March, 1917, and he has been in Russia for ten months of the present year. Mr. Dukes failed to find there most of the horrible conditions, about which the anti-Bolsheviki sit and sing—with their eyes shut. But he did not, by any means, find the Elysium on earth which is found there by the pro-Bolsheviki—also with their eyes shut.
>
> Bolshevism will not survive, says Mr. Dukes. In ten months' time he did not meet a soul, Communist or otherwise, who believed that the present régime could maintain itself indefinitely. As the red terror fades into history, strikes among city workingmen and uprisings among peasants are growing more frequent and more extensive. He believes the Bolsheviki will be unable to prevent this development, and that it spells their doom. The only question to his mind is whether Bolshevism will fall because of an inside movement, or because of external pressure. (He wrote, of course, before the recent reverses of Yudenitch and Kolchak, and before Lloyd George had announced the abandonment of these gentry by England and France.
>
> When Bolshevism falls, in Mr. Dukes's opinion, there will be a series of fearful pogroms against the Jews. The peasants regard the Communist movement as being a Jewish development, and have developed a bitter hatred against the race. Nevertheless, Mr. Dukes believes that whatever form the new government may take, it will be led by men who are in Russia now, not by cowardly *émigrés* who are hiding in New York or Paris and are completely ignorant of the great social and spiritual changes which have come about in recent times. One reason for the lack of anti-Bolshevik leaders within the borders of the country is, however, the fact that the Bolsheviki, many of whom are "born leaders" themselves, are quick to recognize potential opponents, and such men, by hundreds, have been "put away."
>
> While Dukes was in Russia, several American and British correspondents crossed the frontier and toured the country under the auspices of the Lenine-Trotzky Government. This writer makes the definite charge that such correspondents, and other Americans and Englishmen who have visited *Soviet* Russia have been carefully kept from getting into any real contact with the masses of the people. He mentions the instance of a British correspondent who was housed in a *Soviet* hotel in Petrograd. Dukes tried hard to see this man, and found that the Government scrupulously shielded him from contact with anybody who was not the right sort. For this reason he does not think the testimony of such official correspondents should be regarded as conclusive.
>
> That the Allied blockade is starving the Russians is denied by this authority. He declares there is plenty of food in Russia, but the system of distribution has broken down. The famine is confined to the cities, and the inefficient methods of the *Soviet* Government are largely responsible for such scarcity as exists.
>
> For instance, last June the people of Petrograd were allowed one-half pound of bread daily. At that time members of the River Transport Union were getting one and a half pounds of bread daily. Food for the population in general was secured and distributed by a committee of five; but the cooperative societies and

LONG DISTANCE TRUCKING & MOVING





If the Rear Wheel Could Speak—

It would probably be in this wise: "An idle truck pays no dividends. I cannot battle unaided against muddy roads and slippery streets. Equip me with Arrow Grips and I'll serve you faithfully. They assure me of traction under all conditions."

Your truck is not complete unless it is Arrow Grip equipped. A few hours idleness due to loss of traction would pay for a set of Arrow Grips. Protect your truck investment; make on-time delivery certain; guard against accidents and delays; please your driver—equip your truck with Arrow Grips.

Arrow Grips are used by the biggest fleet owners in America. They are attachable or detachable in a few moments without jacking up of truck or unloading. They have no special chain connectors—if chain should break, any standard cross chain can be substituted. They are weather-proof and 100% overstrength. They are the logical traction device.

A size for every truck—a special device for the Ford one-ton.

WRITE FOR "A MINUTE'S JOB"

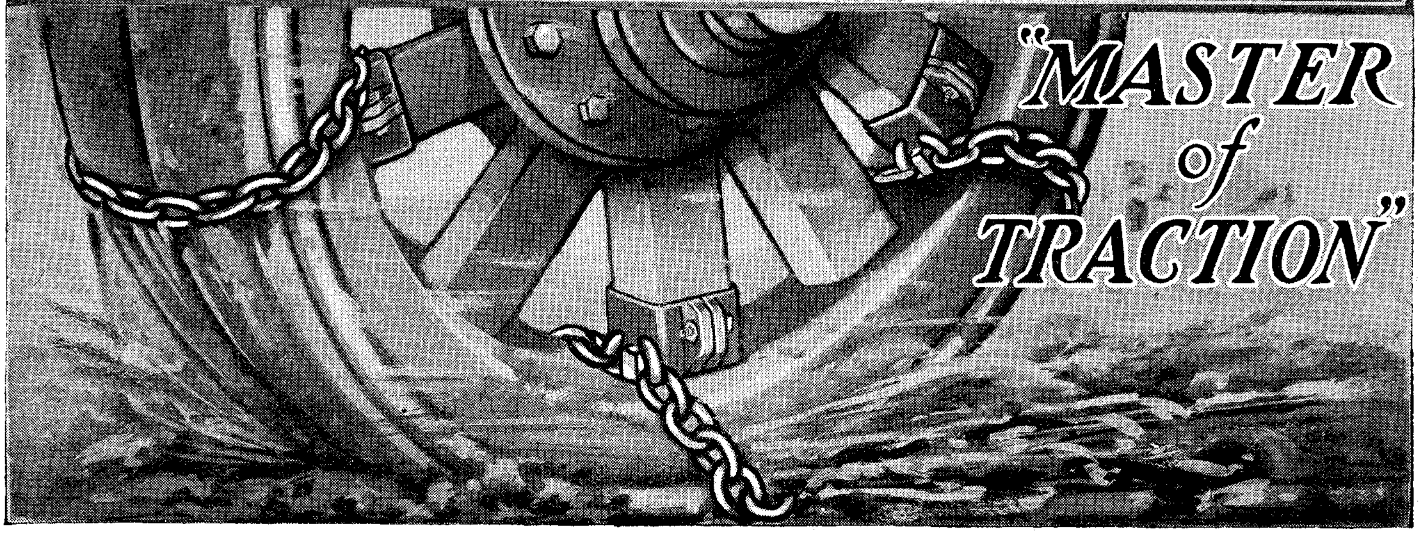
Arrow Grips will be exhibited at the New York Truck Show, Jan. 3rd-10th, at the Eighth Coast Artillery Armory, Space 28, Main Floor; and at the Chicago Truck Show, Jan. 24th-31st, at the International Amphitheatre, South Wing, Space B-18, Main Floor.

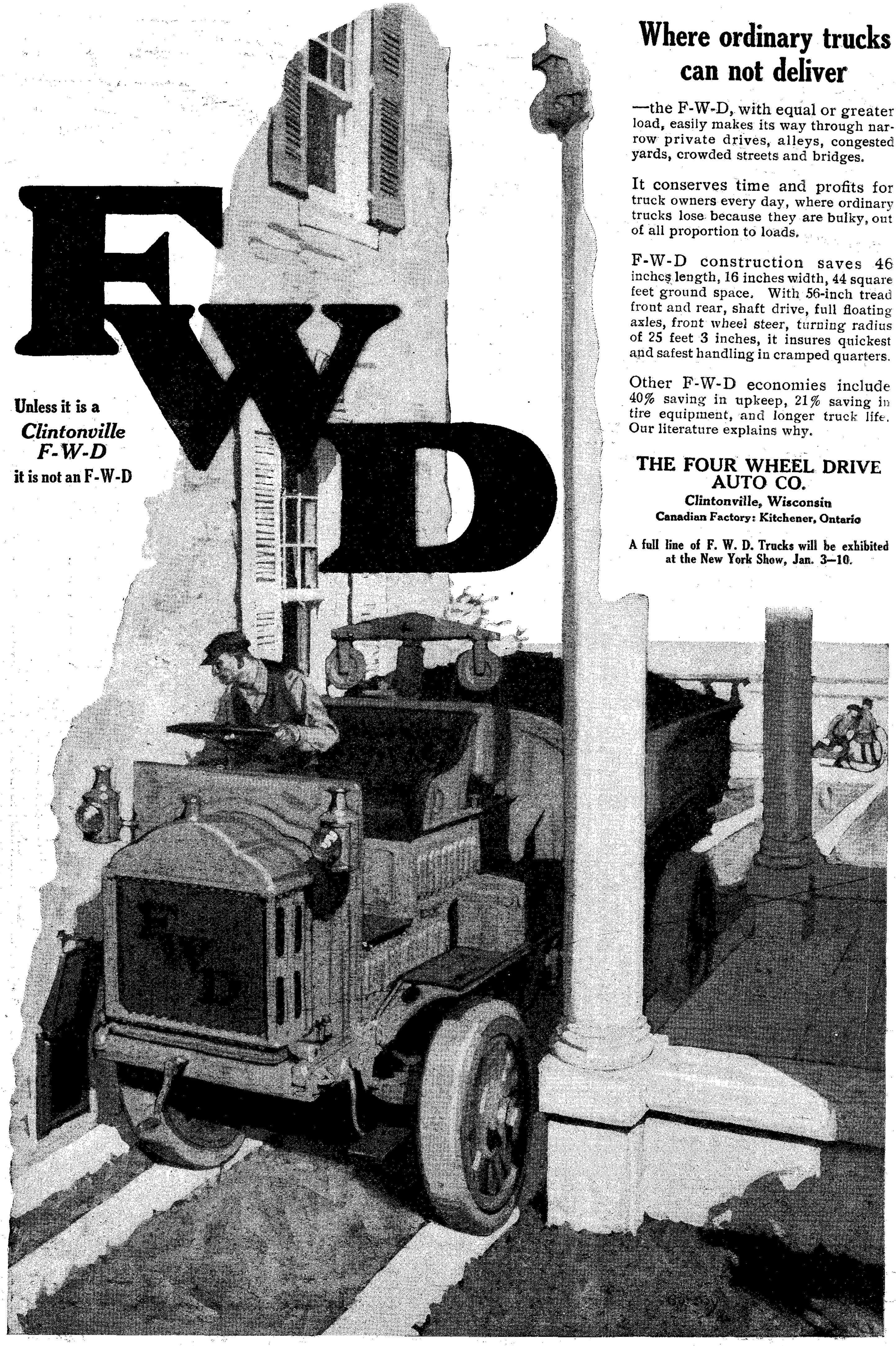
Arrow Grip Manufacturing Co., Inc., Dept. L, Glens Falls, N.Y.

ARROW GRIP

NON-SKID CHAINS FOR SOLID TIRE VEHICLES

REG. U.S. PAT. OFF.





Unless it is a
Clintonville
F-W-D
it is not an F-W-D

Where ordinary trucks can not deliver

—the F-W-D, with equal or greater load, easily makes its way through narrow private drives, alleys, congested yards, crowded streets and bridges.

It conserves time and profits for truck owners every day, where ordinary trucks lose because they are bulky, out of all proportion to loads.

F-W-D construction saves 46 inches length, 16 inches width, 44 square feet ground space. With 56-inch tread front and rear, shaft drive, full floating axles, front wheel steer, turning radius of 25 feet 3 inches, it insures quickest and safest handling in cramped quarters.

Other F-W-D economies include 40% saving in upkeep, 21% saving in tire equipment, and longer truck life. Our literature explains why.

THE FOUR WHEEL DRIVE AUTO CO.
Clintonville, Wisconsin
Canadian Factory: Kitchener, Ontario

A full line of F. W. D. Trucks will be exhibited at the New York Show, Jan. 3—10.

the unions were in some cases permitted to do their own foraging in the country districts. The Government would send out food-buyers selected because of their political beliefs. Their notion of barter was to offer the peasant the official price, and if it was refused to threaten confiscation—which merely made the peasant conceal his supplies. The buyers sent out by the cooperative societies were good business men, who paid what they had to, and secured ample quantities.

The workingmen of Petrograd employed by the state demanded a two weeks' vacation, which the Bolsheviki at first refused, and then granted after several sporadic strikes had occurred. These men used their vacations to go out into the grain-growing provinces and secure flour. Each man was allowed to bring back to the city not more than seventy-two pounds, or two poods, and since they always brought the maximum they received the nickname of "two-pooders." So much flour was brought into the city this way that the price of bread dropt by a third. This, Mr. Dukes says, did not please the Bolsheviki, who draw much of their power from the fact that they distribute food in accordance with a fixt scheme, giving most to those who work hardest and half starving the *bourgeoisie*. They therefore prohibited the activities of the "two-pooders," and the price went up again.

The value of the Bolshevik paper currency has been going down steadily, and to meet this depreciation the Bolsheviki have just as steadily increased everybody's wages. It has been reported from time to time that Lenine's object was so to debase the currency that it would become worthless. However this may be—

If the printing-presses can only turn out the bales upon bales of paper rubles fast enough, the people seem to feel that the matter is satisfactorily handled. Unfortunately, according to the English critic, wages are frequently several months behind the cost of living, and this produces great hardships. Mr. Dukes declares that many women employees of the *Soviet* Government in Petrograd have been forced to resort to prostitution in order to eke out their inadequate wages from the Government and get enough to eat. He contradicts the Bolshevik statement that the social evil has been abolished, remarking that when orders were issued a short time ago for the arrest of women found on the streets several hundred were found on the Nevsky Prospect in the course of a few evenings. He adds, however, that inequalities between the sexes have been completely abolished, and the Bolsheviki have instituted many excellent schemes, such as maternity-insurance.

A striking incident in Mr. Dukes's narrative has to do with the efforts of peasants to smuggle food into the city and sell it to those who have sufficient means to purchase. Such sale is illicit under government laws, but is widely practised by the peasants, who are nicknamed by the urbanites "sack-carriers." Mr. Dukes rode into the city on one occasion in a train filled with peasants who, when the Petrograd station was reached, ran the gantlet of soldiers, who confiscated the packages of all those whom they could stop. The rest fled in all directions and sold their food from door to door.

In Moscow he found cafés by the score which maintained their existence in spite of the laws against them. In one case at least bribery of an assistant *commissar* was resorted to. These cafés had plenty of food, but at very high prices.

And both in Moscow and Petrograd there is a veritable epidemic of candy-stores. The sweets are manufactured in the former city from German saccharin, the business being in the hands of Jews and Mohammedans.

Mr. Dukes, in ten months' time, saw little bloodshed, or none. He found vast discontent with the *Soviet* Government among the common people and much pretended adherence to Communism. On May day in Petrograd he believes the working people celebrated the international Socialist holiday under absolute compulsion. He found freedom of speech and the press, of course, entirely abolished, and an iron-handed autocracy directing the country's affairs. However, the picture he paints is far removed from the awful desolation which the Kolchak propagandists have described for us. As to which of the three Russias portrayed for us is the real one, or whether the truth is so remote that it can not be isolated and defined at all—*¿ quien sabe ?*

HUMAN NATURE AND OIL GAMBLING

AMONG the recent oil discoveries throughout the South is a considerable "strike" near Shreveport, Louisiana. The customary rather hectic excitement and developments have followed. Companies have been formed to drive new wells and develop other mineral territory, rumors of great strikes and fabulous opportunities are in the air, "boom" advertising is showered upon a public already touched with the fever of investing and speculation. "A man interested in oil promotion recently described an honest oil operation as one in which man plays poker with nature," says the New Orleans *Item*, philosophically considering the human nature of the situation. It comments:

The Item has latterly refused most advertising by oil-promoters. Occasionally it has accepted a piece of "copy" from the most reputable sources, or which seemed to be backed by specially substantial people. But its general policy has been to refuse most oil-advertising, especially that originating far away, just as we have always refused all mining-stock advertising, or any other that we have looked upon as being of so highly speculative a character as to resemble a simple gamble. The situation brought so near home is somewhat different, for the investor and speculator in Louisiana has some opportunity to investigate the personnel of companies promoting oil and gas concerns and to ascertain at first hand whether a proposition offers a risk, an inducement, or a gamble, which he is willing to take with his eyes open.

Oil promoters and companies are, of course, both good and bad. While ignorant of the oil business, *The Item* has always looked upon most oil promotions as more or less swindles. A man interested in oil promotion recently described an honest oil operation as one in which a man plays poker with nature. The great trouble is that most of the people who "invest" in oil propositions are of a class who should not be taking chances on such risks.

Every one is advised against gambling on the horse-races. Still there is a feeling that a small percentage of pony-gamblers are not harmed by it. It gives us a certain amount of joy when we hear of some "hard-boiled egg" or "tight-wad" who has accumulated a considerable pile by other methods than hard work, has "dropt" some of it on a horse-race. It is the evidence of occasional weakness in an otherwise strong financial intellect.

It is not fair to compare oil speculation to horse-race gambling. For the promotion of gas, oil, and mining companies, if the promoters are honest, is not only perfectly legitimate, but aids very largely in the development of the resources of our State and our country. Horse-racing, on the other hand, is a curse even when you win—for some one else must then lose, and the gamble itself is entirely non-productive.

It can be left to the advertisers and promoters to tell the marvelous profits that result from lucky strikes in oil. It is to be hoped that their tales do not make too great an impression on widows, orphans, persons in charge of trust funds, or those who should save their money for a rainy day or apply it to the needs of their families. These classes certainly should steer clear of the oil gamble.

As oil development goes on in Louisiana, true stories will be told of poor and adventurous persons, and of lucky ones, becoming millionaires. But we will not be told of the thousands that buy oil stock under the impression that a stock certificate necessarily represents value, and then lose every cent they have invested.

It can not sensibly be said that the oil business is one that every one should avoid. People who have a surplus and can afford to lose a part of it, and are of an adventurous turn of mind, people who want to pit their judgment against nature, and know how to discount the probability of their coming into fortunes overnight—in other words, people who know how to figure chances in the oil business, these are the people who have a right to buy oil stock and take a hand in this big gamble.

Persistent betting on the horse-races means certain loss. This may or may not be true of speculation in oil stocks. Some years ago New Orleans was badly "stung" during a year of oil speculation. If New Orleans catches this fever again because of the oil development in Louisiana it is possible that it may be as badly "stung" as before.

It would be well if there were some State or financial authority to pass on these proposals, and define what is legitimate and illegitimate in oil stocks and their promotion. There is not much hope of such a tribunal.

A great oil agitation is progressing in north Louisiana. Whether this has reached the stage of hysteria in which a great many people are going to lose money, or whether it has still to reach this stage, is hard to tell. Every once in a while speculators, investors, and the gambling public take up things of this kind, and the fever has to run its course.

It seems like the irony of fate that substantial, money-making investments remain undeveloped for years, while people go into these unstable lines. It is true that in motor-cars, in moving pictures, and in many other industrial lines, enormous developments have occurred during the past ten or fifteen years. All of these represent in a sense opportunities which are constantly arising in America. The general public wakes up to these opportunities when they have been largely exploited by outsiders.

If these few words of warning will help

to keep people out of the oil-boom business, that is, people who have no right to trifle with ANY boom at all, they will have served their purpose.

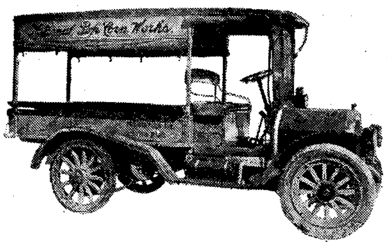
DESOLATION AND SUFFERING AMONG SIBERIAN PRISONERS

HUMAN misery and the American Red Cross—which are generally found together, to the great benefit of those who are suffering the misery—are playing a part in Siberia, especially in Vladivostok, says *The Japan Advertiser* (Tokyo), deserving of the attention and assistance of the civilized world. Fearful conditions still exist in the Siberian prison compounds. No Red army prisoners are held there, but Austrians, Hungarians, and a scattering of Germans and Turks who have been impounded, many of them, since the fall of Peremysl, shortly after the beginning of hostilities in the summer of 1914. The armistice was signed almost a year ago, yet, we are told, it has meant less to these men "than if it had been a truce between hostile tribes in South Africa." Cut off from all intercourse from the outside world, they are dependent upon a country torn by civil war, unable even to take care of its own soldiers and people, to say nothing of military prisoners. Aid on a small scale has been attempted by several of the minor Powers, but the relief of more than 150,000 men can not be done except on a large scale by great organization. A recent investigator of prison conditions reports:

> After you have seen the prison-camps, and talked with the men, you must not judge the Government which permits such conditions to exist, for it should be borne in mind that the people of the country are themselves hungry, ill-clothed, and exiled from home by the Bolsheviki, who recognize no law.
>
> The summer's reverses on the Eastern front necessitated the evacuation of the civilian population and the military camps as well. The journey eastward was made in tiny Russian box cars divided by a platform or shelf that permitted from forty to fifty men to travel in a single car. Only those men in the upper tier had light. The small window that furnished light also furnished the only ventilation. There was absolutely no sanitary conveniences. Soup and a pound of water-soaked bread each day were the rations for the journey. Altho the meal was supposed to be served at noon, there were several occasions when it was not given to them until midnight, and on one occasion at three o'clock in the morning. During the trip acrossManchuria no meals were served.
>
> In addition to the one meal, both officers and men receive from the Russian Government the generous sum of one ruble and ninety-five copecks a day for extras. As this amounts to about a cent and three-quarters, at the present valuation of the ruble, it is necessary for the prisoners to save several days before they can even buy a pound of bread, to say nothing of clothes, shoes, tobacco, and other necessities, which the men must provide for themselves or go without.
>
> Of the men stationed at Nikolsk, about 50 per cent., according to the chief doctor of the prison hospital, are invalids suffering from malnutrition, chronic diseases, such as tuberculosis and heart-disease, mental disorders which are common because of the seemingly hopeless situation, former unsanitary living-conditions, and exposure. Many men have been crippled for life as a result of their arms and legs having been frozen. Last winter many of the camps were swept by epidemics of typhus and influenza. The death-toll in one camp was 1,400 men. Some of the men are suffering from old wounds that are still discharging pus, tho the wounds were inflicted five years ago.
>
> The barracks in which the prisoners live are long, low, wooden buildings divided into tiers to make more space than is given by the original plan. There is less than five feet between the first and second tier, so that a man can not stand upright in his own compartment. The floor space is but forty-eight square feet for each two men. Most of the beds are a couple of boards raised from the floor on bricks at each corner. The bedding is a pile of rags. Such blankets as the prisoners have are worn to shreds, or have been used to make underwear. There are but a few mattresses in the prison-camp, the hardness of the boards having been broken in a few instances by burlap-bags filled with straw.
>
> The dishes, knives, and forks, which they buy themselves, or go without, are also evidence of their poverty-stricken condition. Several officers are obliged to eat from the same plate; knives, after years of usage, have no handles or broken blades and the forks are without the full number of prongs. Rudely built tables and benches serve to supplement the beds in the grim quarters allotted to each man, but owing to the numerous partitions the cubby-holes opening from the center aisle of each barracks are practically without light.
>
> Everywhere there are rags, rags for bedding, rags for underwear, clothes, rags for uniforms, rags for towels, rags even for shoes. And these rags have been washed and worn, washed and worn until there is nothing left to tell of what material they are made.
>
> Officers and men who for physical or other reasons can not get work in the town, occupy themselves in the prison workshops or by painting, drawing, modeling, and wood-carving. The products of their handwork are sold in an exhibition-room arranged for the purpose, but the prices are so low and customers are so far between that it is not a very productive enterprise. There is real talent among the prisoners, one young Hungarian officer having exhibited in Paris and Berlin before the war, yet his pictures do not bring him enough to buy a pair of shoes. The light in which many of the prisoners do their work is so bad that many have injured their eyesight.

The prisoners' clothes are pitiful beyond description. In many cases the old uniforms have gone entirely, old potato-sacks and flour-sacks serving as both trousers and shirt. Tho snow already has fallen in some localities, no provision has been made for the winter's food-supply, and the absence of blankets makes the thought of the future months unbearable. All of these conditions are complicated by physical ailments in the prison hospital at Nikolsk, a mile or two from the other camps. We read:

> There are two low buildings, divided off into several wards; three small ones for officer medical cases, one for convalescents, one of officer and soldier surgical cases, one for soldier medical cases, and one for an isolation ward. The grounds are laid out in a vegetable garden which supplies the hospital kitchen and there are flowers that the prisoners have set out. All-around the compound there is a barbed-wire fence, concealed by a sunflower hedge, and an amusing fact is that the fence has been built by the prisoners to keep intruders out, rather than to keep themselves in. The men are better off inside the prison-camp than they would be outside.
>
> The prison wards are furnished with rusty, paint-scarred, iron beds, and here and there are wooden tables made out of worm-eaten boards that would hardly serve for fuel. The clothes which the patients wear in bed are the same that they wear when they are discharged from the sick wards. Sheets for the beds have been donated by the American Red Cross, but there is little else but rags on the beds. A drug-room in the camp contains medical supplies that the Red Cross has donated.
>
> When questioned as to the future of the cases the doctor replied that about 50 per cent. were tubercular, and the others included illness from typhus, typhoid, diseases due to exposure, malnutrition, and former bad sanitary conditions. Within the last six months he said there had been eight cases of violent insanity.
>
> "I have worked for three years in the prison hospitals, but without the work, I, too, would have been insane. The American Red Cross is wonderful. It can do anything. Think of our wives and children! For two years we have not heard from them and they do not know whether we are alive or dead. The American people are generous. Beg them to send us home. If we can not all go, take the old men and the invalids before it is too late."
>
> Case after case in the hospital and in the barracks reflects the distress of mind and body in which the prisoners live, the pitiful encouragements on which their hopes are based, the dignity even with which every added hardship is met. One soldier had received a card from his sister in the United States. The card was dated 1915, and the message was that the sister's husband would send some money to the prisoner. The money never had come, but the card was still treasured. He still expects the money to reach him. Another soldier told how he had changed his rubles into dollars, how he had been robbed, and how some American officers hearing of his plight had made up his loss. A third story confirmed by several officers at different times gave the pitiful details of an attempt on the part of the Danish Red Cross to send about five hundred prisoners home by train through European Russia during 1917. Hospital supplies, medical supplies, and other things were all taken from them, and there was nothing to do but to turn back.
>
> The saddest incident of all was a visit to a Hungarian major who was dying. He had a tiny cell; it couldn't be called a room—and in the cell were a battered bed, a roughly made table, and a bench. A pillow stuffed with straw supported the prisoner's head and a worn Chinese quilt covered the emaciated limbs. There were no sheets, no blankets, nothing of comfort or cheer save a tin can filled with the last of the autumn flowers. Tho too weak even to raise his head, he brought his hand to his forehead in salute and motioned toward the bench. Somewhere in Hungary



The illustration above shows the first Federal ever made. Sold in 1910 and delivered personally by Mr. M. L. Pulcher, President of the Federal Motor Truck Company. This truck is still in daily service after nearly ten years of continuous usage.

* * *

To-day, Federals are used in every conceivable line of business in all the principal nations and countries throughout the world.

* * *

It is one of the most interesting and gratifying facts in Federal history that 62% of Federal sales have been resales to Federal owners so well satisfied with their first purchase that nothing but "Another Federal" will do.

* * *

Since the very inception of the Federal Motor Truck Company, there have been no radical changes in the personnel or policies of the organization.

* * *

Founded on the broad principles of building the best motor truck that engineering brains and human skill can produce, Federal has grown up with the industry in a solid, substantial way which has required no reorganization or re-financing to maintain its hold on trade or public favor.

* * *

Federal has made no false moves in offering a model or type of motor truck which did not stand the acid test of hardest usage in owners' hands. From Model "A" down to the present line, every truck has represented an increasingly successful series of mechanical and manufacturing achievements.

* * *

The Federal war record is one of which every Federal officer and employe may be justly proud. On the border and on the fighting front in Europe—under every conceivable form of use and abuse—Federal trucks typified in unfailing service the 100% loyalty and production efficiency at the factory "back home in the States."

Experience

The world knows no short-cut to great accomplishment—it comes only as the fruit of painstaking effort—of experience.

The pilot who guides his ship safely past the dangerous shoals has sailed those waters before.

The manufacturers who build a successful motor truck have learned from cold, hard experience—have solved problem after problem—ironed out mechanical and merchandising tangles—and built better each succeeding year because they *knew* from experience.

Experience of this sort cannot be bought in any market of the world. It is priceless. It can never belong to beginners or transients—it is never known by stock schemers or the insincere.

Experience has built the Federal motor truck as it stands to-day—without a peer in the field of scientific endeavor—a practical, steel-hard freighter carrying its burdens faithfully and *constantly* at low cost.

The Federal more than ever is making good—even in these exacting times—because its builders have known the experience of a decade.

Federal Motor Truck Company
Detroit, Michigan

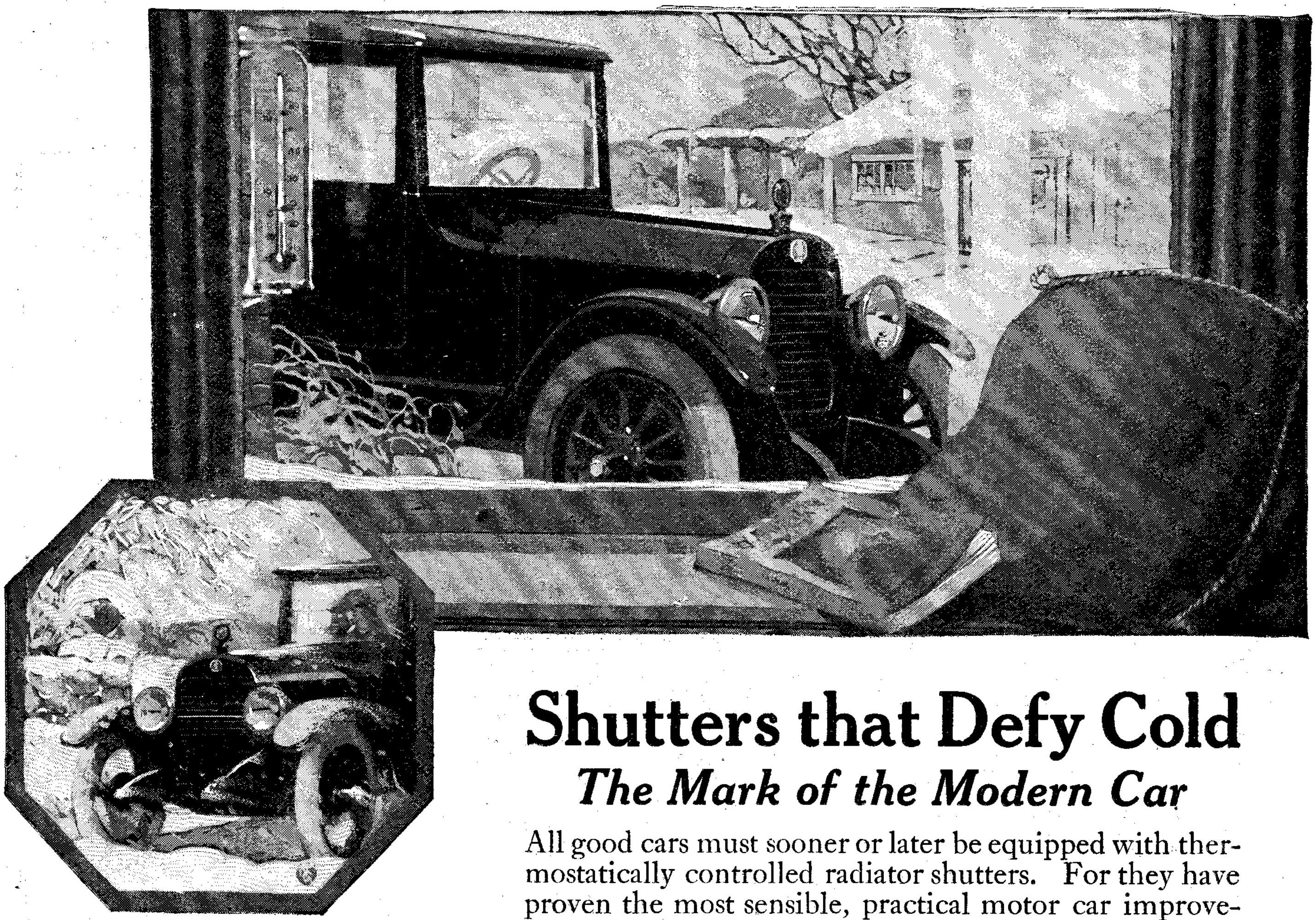
Another **FEDERAL**

The Federal today is the fruit of ten years' study and effort—the experience of a decade of truck manufacture.

FEDERAL

One to Five Ton Capacities

Columbia Six



Shutters that Defy Cold

The Mark of the Modern Car

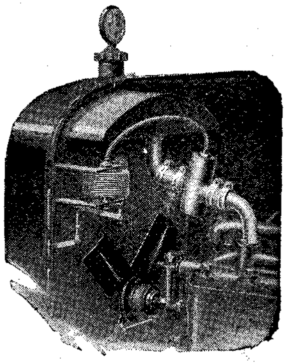
All good cars must sooner or later be equipped with thermostatically controlled radiator shutters. For they have proven the most sensible, practical motor car improvement that has appeared since the advent of the self-starter.

The Columbia Six in line with its up-to-the-hour standards has them *now*.

They banish hard-starting, slow warming up and running down of batteries. They banish cold-weather makeshifts—such as hood covers, blankets, cardboard protectors. When the day is cold and the motor naturally needs to be kept warm, the shutters close, keeping the heat in. When the day is warm, the shutters admit a breeze.

They function automatically, without the slightest thought or action on the driver's part. Automatically, they insure maximum motor efficiency—the smoothest of action—most miles per gallon, trim appearance the entire year 'round.

Surely they are the mark of the modern car. They make Columbia closed models true all season cars. For the motor, as well as the occupants, is protected from disagreeable, energy sapping changes in temperature.



For the Mechanically Inclined

The thermostat which controls the radiator shutters on the Columbia Six is a big, staunch, hardy mechanism.

Note its size—nothing delicate about it. In fact, it's extremely powerful. It pulls the shutters closed or forces them open under any and all conditions.

The slightest change in temperature produces instantaneous response from it. Still, it is built with the same endurance that you find in all the famous units in the Columbia. Year in and year out, it performs dependably, without the slightest attention from the owner.

Prices—Five-Passenger Touring Car, $1695.00; Four-Passenger Sport Model (Five Wire Wheels included), $1845.00; Two-Passenger Roadster (Five Disteel Wheels included), $1845.00; Four-Passenger Coupe, $2850.00; Five-Passenger Touring Sedan, $2850.00. *Prices F. O. B. Detroit*

COLUMBIA MOTORS COMPANY
DETROIT, U. S. A.

Gem of the Highway

COLUMBIA SIX

he had an English wife and children, and the doctor thought that it would comfort him to hear her language spoken. His gratitude was overwhelmingly pathetic. He wanted nothing, he said. The officers were very kind and gave him every comfort. He was sorry, but he was too weak to talk. Perhaps next time he would be able to express to the American Red Cross his appreciation of what they were doing for his men.

There was no word of complaint, no request, no regret; only gratitude that some one from the outside world had come to comfort him.

In spite of the years of starvation, privation, and hardship, these men have never forgotten that they were officers and soldiers of a once proud race, but the arrogance of their former military despotism has gone, and in its place has come a spirit of democracy and fraternity. They have been through the fire together, officer and man, and if they ever go home they will take with them a gift that in after years will help to democratize the world.

Clothes and food and medicine will relieve the suffering of their bodies, but for their mental anguish there is only one remedy, and that is home!

HUNTING THE KING OF THE NORTH

When the snowdrifts heap and the ice thickens over the lake, we have at least a little of the proper atmosphere and setting for tales of arctic adventure, stories of good hunting on the shores of polar seas. In all the region of ice there is no other animal so thoroughly respected by the Eskimo as the white bear, known to us chiefly in the shape of a formidable-looking rug in the homes of the wealthy; and it is of the prowess of the white bear, "Tiger of the North" and "King of the North," that Donald MacMillan tells us in that interesting new magazine, *The Open Road*. Mr. MacMillan will be remembered as the young Bowdoin College graduate who was with Admiral Peary on his final successful expedition to the Pole, and also as the leader of the Crocker land expedition; and his years of service in the Far North qualify him to speak with authority both of the Eskimo hunters and their quarry. Of the mental attitude of the black-haired men of the North toward their most formidable adversary, Mr. MacMillan says:

> *Nan-nook-suah*—Big Bear—is admired, for he possesses in full all those qualities which every successful hunter would have—patience, courage, strength, endurance. When the Eskimo and his dogs drop from weariness, the polar bear plods on, for he is tireless. When biting winds cut the face and blinding drift obscures the trail, driving the native to shelter, Nan-nook smiles at the weakness of man. When the brightness of summer has gone and winter darkness creeps over the land, concealing all tracks of game and the tiny breathing-holes of seals, Nan-nook is not balked, but goes unerringly from hole to hole. When strong winds and heavy seas drive the Eskimo and his *kai-ack* to the shelter of the headlands, Nan-nook easily breasts the icy waves, or goes drifting off to the south complacently seated upon an iceberg.
>
> Does the white man wonder then why in the little sealskin bag round the neck of the Eskimo child there may be found a bit of fur or the claw of the polar bear? Could there be—they say—a better or stronger guardian over the life of the boy? Surely he can not come to harm with such a protector.

Apparently, Mr. MacMillan had a way of endangering himself through his constant desire for good photographs of the polar bear in action; there seems to have been plenty of action, too. In the spring of 1916, while driving with nine sledges and ninety dogs on the ice of Eureka Sound, Mr. MacMillan's Eskimo, whose eyes even at a distance could distinguish the slightly yellowish fur of *Nan-nook-suah* from the pure white of the snow, called attention to a medium-sized polar bear, stretched out at full length prone on the fiord ice, his black muzzle hidden in the hair of his forefeet. Says this hunter with camera and rifle:

> His mind was so intent upon the capture of a seal at its breathing-hole that he did not notice our approach until we were within one hundred yards. The dogs were now at full speed. Sledges were bounding, whips were snapping, Eskimos were yelling like mad; for it is a curious belief of theirs that the louder one yells the slower the bear will be in starting—possibly petrified at such an unearthly noise!
>
> The bear finally jumped to his feet, plainly mystified at such an unusual sight as ninety leaping dogs. Men and dogs were as yet unknown to him. Hitherto all life had avoided him, but now something was coming! He turned and with long leaps headed for the center of the Sound.
>
> My ten gray dogs, all splendid animals, had swiftly passed team after team and were now fast forging to the front.

At this exciting moment Mr. MacMillan, gripping his sledge-load with his knees to steady himself, brought his camera into action, burying his face in the hood so as to focus on the bear, now only twenty yards ahead. Then, we read:

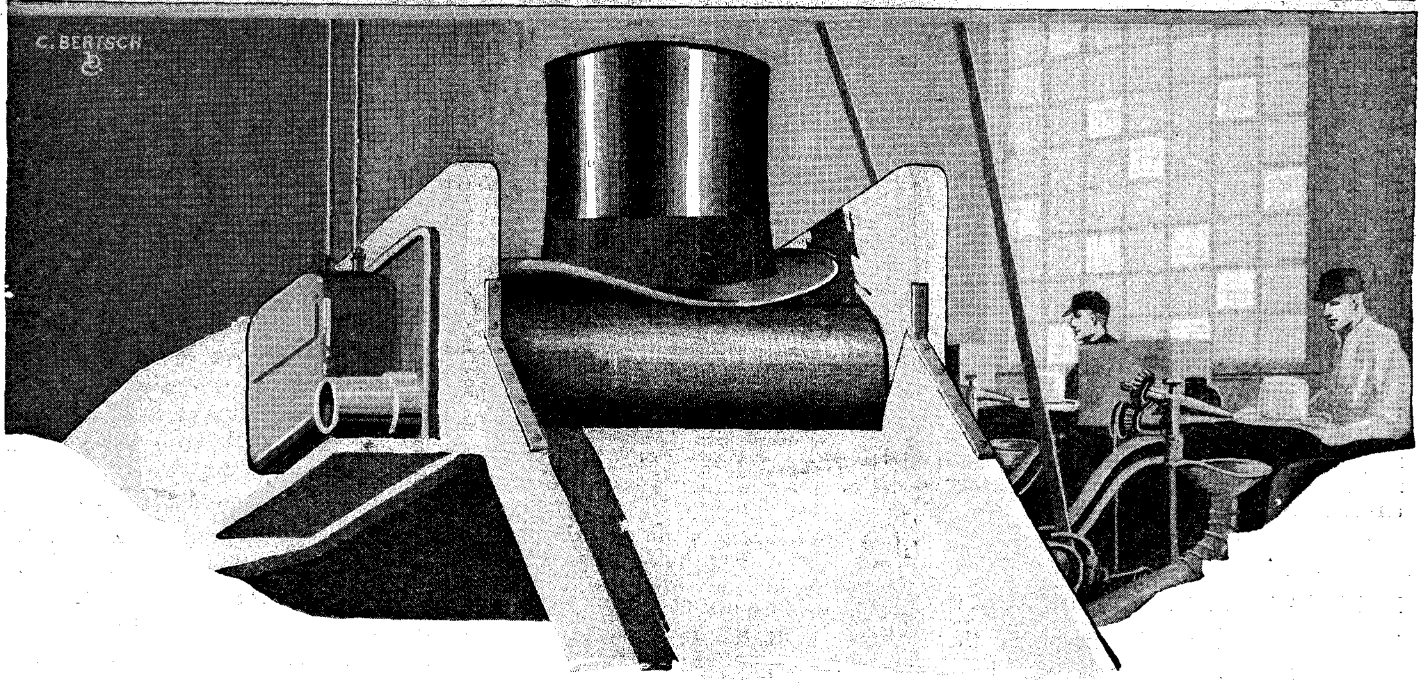
> Suddenly there was a blurred figure on the ground glass, and a thud against the bow of my sledge. I had scooped him up! When the bear suddenly stopt, my dogs scurried to right and left, allowing him to come right "aboard." "Close-ups" are much desired in motion-pictures, but this was not one until I made it so by reeling off about fifty feet to the right before I stopt to look back. When I turned the bear was standing on the sledge critically surveying my very much excited dogs. In another instant eighty more with flying traces had joined in the attack. The bear leapt from his vantage-point directly into the center of the pack. My picture was forgotten. Knowing that my dogs were handicapped by being harnessed to the sledge, I feared for their lives.
>
> Everything was in a chaotic mass. My sledge was overturned in the midst of the *mêlée*. The bear was buried beneath the yelping, fighting dogs and the whole mass seemed to be tightly bound together with the ten sixteen-foot traces. Yelps of pain from the dogs and yells of excitement from the eight Eskimos added confusion to the fight. Nu-ka-ping-wa was brandishing a killing-iron, but refrained from throwing it, fearing lest he might kill one of the dogs. Ak-kom-mo-ding-wa was dancing round madly with a 35 Winchester at full cock, while the rest of us dodged and ducked the muzzle. At last I grabbed it from his hands, and forcing the barrel between two of the dogs, fired through the body of the bear into the ice.

In the Eureka Sound region, seven bears were killed in as many days, one big male easily defending himself against the ninety dogs, knocking them about with his forepaws as if they were rubber-balls, and biting one so that it died within an hour. Again in his anxiety to get a good photograph, when it appears that the state of the commissary should have made bear-meat the chief objective, Mr. MacMillan, by the breaking of a snow-bank was precipitated into a hollow full of desperately clawing bear and fighting dogs, described as an "inferno of hair, yelps, sharp claws, and a tremendous red mouth—which appeared at the time to be filled with at least four or five sets of big white teeth." A bullet from an Eskimo's automatic finished the bear as the too zealous photographer was climbing out of the *mêlée*.

At this time provisions had been scanty, but Mr. MacMillan thus tells how plenty simply walked into camp:

> Scarcely were we tucked away in our sleeping-bags when a sharp yelp from one of the dogs held us at attention. A few hurried whispers of "*Nan-nook-suah!*" (Big Bear!) were followed by E-took-a-shoo jumping out of his bag and clapping his eye to the peep-hole over the door. "*I-shoo-woo!*" ("Sure enough!") he said, under his breath. In the twinkling of an eye I was alone. My Eskimos had gone, leaving their clothes behind, merely slipping on their *kamiks* (boots).
>
> The picture before me as I emerged from the snow-house will live long in my memory—three naked, brown, muscular bodies standing on a mound of ice with rifles to their shoulders, all taking careful aim. I hastened toward them.
>
> The short bark of Arklio's automatic and the snappy report of Nu-ka-ping-wa's .401 were followed by the crash of E-took-a-shoo's .35. Nan-nook became a huge white ball of hair, claws, and snapping teeth in his endeavors to bite holes in his hindquarters. Down, up, and down again. Then with a hop, skip, and a jump, he headed for the Sound. E-took-a-shoo ran for his clothes, and Arkilo for his dogs, while Nu-ka-ping-wa squatted on his hams and yelled.
>
> E-took-a-shoo, now drest, ran south over the sea ice on the trail of the bear, but he was soon overtaken by Nu-ka-ping-wa, who with better judgment had drest and had harnessed my dogs to his sledge. At three o'clock they were back with the sledge red with meat.
>
> And would you believe it! Scarcely had we slipt down into our warm bags again when another bear walked into camp and almost up to our very door. Undoubtedly he would have called had the dogs not given the alarm! The gods of the arctic were delivering our orders of the last two weeks right in the front

Lamson Conveyors



Stetson Hats Go Through Factory on a Lamson Conveying System

The hat factories of the John B. Stetson Company are among the largest and most complete in the world, and they are equipped with a Lamson System of Mechanical Messengers and Conveyors. Throughout four six-story buildings the Mechanical Messengers carry orders, memoranda and other papers, the Conveyors and Chutes carry materials, unfinished and finished hats, and packing cases and boxes.

This Lamson installation saves its cost every year. It is in constant operation during working hours, handling many tons of material. It does work formerly done by hand and does it far better. It occupies no valuable floor space, running overhead out of the way.

Practically every factory can make profitable use of Lamson Conveyors. They are as varied as industry itself—Lamson Systems carry automobile bodies in one plant, olive bottles in another, flour in a third. They don't get tired or quit; they don't make mistakes; they save space—and the space saving alone is sometimes enough to pay for the conveyors. They reserve human labor for work that requires mind rather than mere muscle. They place the thing wanted where it is wanted, just when it is wanted.

The Lamson-equipped factory can operate at full speed all the time with no congestion in the packing and shipping departments. Plants using Lamson Systems have learned a new meaning of the word "capacity."

The Lamson Book on Conveying shows what Lamson Systems do, how they simplify production and packing, how they save. A copy will be sent on request, or our representative will call and discuss your problem with you.

THE LAMSON COMPANY

100 BOYLSTON ST., BOSTON, MASS.

Branches and Service Stations

Boston	100 Boylston St.	Cleveland	2063 East 4th St.	Los Angeles	221 San Fernando Bldg.
New York	15 West 44th St.	Cincinnati	119 East 5th St.	St. Louis	709 Pine St.
Philadelphia	210 N. Broad St.	Indianapolis	Cor. Washington and Illinois	Dallas	905½ Elm St.
Pittsburgh	319 Third Ave.	Chicago	6 No. Michigan Ave.	Seattle	215 Stewart St.
Baltimore	Equitable Bldg.	Omaha	418 McCague Bldg.	Washington, D. C.	426 Colorado Bldg.
Rochester	194 Main St. East	Minneapolis	320 Tribune Annex	Atlanta	30 Moore Bldg.
Detroit	97 Woodward Ave.	San Francisco	617 Mission St.	Montreal	Jones & Glassco, Reg'd. St. Nicholas Bldg.
Toronto	136 Simcoe St.	Vancouver, B. C.	603 Hastings St.		

Additional Service Stations

Denver, 1622 Arapahoe St. New Orleans, 124 St. Charles St. Albany, 22 So. Pearl St. Buffalo, 194 Main St. Kansas City, 210 New Ridge Bldg.

yard! The bottom had fallen completely out of the high price of meat.

The largest bear he ever saw, Mr. MacMillan tells us, taught him that the King of the North is expert in skiing. When this bear strolled into view, the author says,

> I slipt two of my best dogs and let them go ahead to overtake and bring the bear to bay while I ran on with the camera. And here I noticed something which perhaps has never been recorded, and which explains the peculiar motion of the polar bear. Altho he was going rapidly, his feet never left the ice! He was skiing! And with the skill of a professional! Undoubtedly when conditions are right—a smooth, slippery, compact surface—the polar bear takes advantage of it for rapid, easy travel. The soles of his big feet are admirably adapted for skiing.
>
> With protruding upper lip and now and then a rapid exhalation of his breath, he glided on, taking but little notice of me and the camera a few yards away. His eyes were on the dogs, which nipt his heels and nimbly sprang beyond reach of his lightninglike paws.
>
> As soon as I had secured my photographs, I signaled Nu-ka-ping-wa to bring up the .33—and that was the end of Nan-nook.

Mr. MacMillan has some amusing stories to tell of a forty-pound bear cub that he picked up on the ice of Smith Sound, and named "Bowdoin" in honor of his *alma mater*. This youngster, evidently an orphan, was feeding on the remains of a seal, and stood up and showed fight like a veteran. He became friendly enough, but was anything but domestic, overturning the stove and generally wrecking things in his endeavor to get out of the house in which he was confined. When he was assigned to more natural quarters on a neighboring snow-bank, however, he seemed completely happy, playing from morning to night, "ascending leisurely to the height of the slope, then deliberately stretching out his four legs and descending swiftly on his stomach to the bottom!" Thus it appears that polar bears are fond of tobogganing as well as of skiing. Of his pet Mr. MacMillan says further:

> I grew very fond of him, for each day he accompanied me on my rambles over the hills and up the long white fiord in search of the eggs of the big burgomaster gull, the dovekie, and the white gerfalcon—creamdrops to him. And now and then we went to the edge of the ice for his swim. A red-letter day! How he did enjoy that cold water and how reluctantly he always left it! It was very evident why Nannook is called the "water-bear." On land or ice the polar bear is a bit awkward and ungainly, but in the water or under water he is perfectly at home. Once when a large bear visited our harbor and was seen swimming from headland to headland, the natives thought at first that he was a white whale—so perfectly did he dive and swim.

At last Bowdoin felt the call of the wild and escaped into the ice, where he may now be living as a patriarchal polar bear, having learned to keep away from both white men and Eskimo, whether bearing cameras or automatics.

THE MYSTERY OF THE DRIPPING RECTORY

A "MYSTERY HOUSE" lately furnished a nine-days' sensation in a little Norfolk (England) village, much to the interest of the British press, and the riddle aroused a good deal of curiosity before it was finally solved. That august periodical, the London *Times*, sent a correspondent to the village and concerned itself with grave speculations over the matter. "It presents so many peculiar features that no one single hypothesis seems to account for all the facts," said *The Times*. "There are one or two data that the superstitious might be inclined to regard as supernatural, and the more incredulous would ascribe to human interference." When the unfortunate rector who lived in the house had given up in despair, and every possible theory had been advanced by the newspapers, the solution was ferreted out by an "illusionist" who happened to be near by on a holiday. The correspondent of the London *Times* gave this summary of the case soon after the trouble began:

> From the rector, the Rev. Hugh Guy, I have obtained a full account of the phenomena so far as they have been recorded. One day when there was a big explosion in France earth-tremors were felt at the village of Swanton Novers, and early in the afternoon five greasy blotches appeared on the scullery-wall of the house. At the same time, an odor of sandalwood-oil was noticed to be hanging about the garden. Altho these manifestations aroused comment, no special signification was attached to them, and the following day the family left the village for a fortnight's holiday. If anything occurred during the period when the house was closed it was not of a startling kind, but when the rector returned home, water with a faint trace of paraffin began to drip from the scullery ceiling. This was regarded as a matter for the local plumber, who was duly called in, but failed to discover the leaking pipe. On the following day water fell from the ceiling of the maid's bedroom. The girl was transferred to a bed placed in the bathroom, but immediately she got there a fresh shower of oil and water occurred.
>
> The situation rapidly became worse during last week. First the dining-room, then the drawing-room and bedrooms were affected. Visitors who had come to stay with the rector had to leave. Mr. Guy's two young nieces were driven from their rooms by another shower of oil on their beds.
>
> On Wednesday oil and water spoiled the breakfast-table cloth. "In the scullery," the rector told me, "we were practically flooded out. The stuff came from the ceiling in gallons. We made a hole through the floor above it, to discover the source of the downpour, to find even the laths to be dry. More extraordinary than anything else is the fact that since this hole was made not a drop of water or paraffin has fallen through it, but there have been drippings from other parts of the ceiling. The further end of the week the house had become uninhabitable. Much of the oil we find is highly inflammable."
>
> About five this afternoon, while Mr. Guy was showing me over the almost empty rectory, a furniture-remover let us know that a fresh shower had taken place in the kitchen. I went to look at what was happening, and saw that the floor was splashed with water, and that a fresh, discolored patch about eighteen inches long had appeared on the ceiling. From this spot half a dozen oily globules were suspended, and occasionally one of these fell. There was a strong smell of paraffin about the room, but that was general throughout the house. The "manifestation" could have been caused by some person throwing up a cupful of oil and paraffin, but who would do this?
>
> One matter which requires clearing up is that the appearances of the oil are limited to the daytime, and are almost exclusively confined to rooms where a little fifteen-year-old girl servant chances to be. "The maid seems to act like a water-diviner," the rector said. I noticed the girl to-day, and should not suspect her of any inclination toward practical joking.
>
> With regard to the hypothesis that Swanton Novers is built on oil-bearing clay, and that the recent explosion has liberated oil below the soil, it is noteworthy that no other house in the village has yet been disturbed by the outcrop of petrol or paraffin or even water showers. Another point is that the walls of the rectory are dry externally, and investigation has revealed no visible channel by which the oil mixtures could have reached the ceiling from which they dript. The latest theory put forward to account for an uncanny state of affairs is that the petrol, paraffin, and water originated in a spring, not yet located, in which these substances have become combined. Should this theory be sound, it may become necessary to ask whether the large oil and petrol stores at Thursford Station, some two miles away, had any bearing on the riddle.

Some few days later *The Times* announced that the puzzle had been solved, and in this wise:

> Mr. Oswald Williams, the illusionist, who is holiday-making at Cromer, proffered his assistance to Mr. Guy, who, on his suggestion, dismissed the servant-girl for three days and caused the house to be shut up rigorously. During this interval no liquid fell. In the meantime, Mr. Williams cut off the water-supply and removed all liquids from the premises except that he bestowed about the rooms haphazard several pails containing water strongly salted with common table-salt. On the return of the girl yesterday morning she reported two more falls of liquid. This was found by Mr. Guy to be salted water.
>
> No accusation was then made against the girl, it being thought best to await the return of Mr. and Mrs. Williams, who were due to arrive from Cromer again during the afternoon. Mr. Williams, Mr. and Mrs. Guy, and two other persons then went into one of the front rooms. Mrs. Williams proceeded quietly to an upper room above the kitchen, the ceiling of which had been torn away by explorers seeking for the cause of the mystery. As the floor-boards of the upper room had also been removed, there was an aperture through which Mrs. Williams, by exercising great caution, could see what was happening below. She plainly saw the girl take up a glass and throw some of the salted water up to the ceiling. She at once raised the alarm, and finally the girl, after first denying her hoax, made a clean breast of the matter in the presence of the whole of the party, and burst into tears.

DISABLED OFFICERS WHO ARE "RETIRED" AND THOSE WHO ARE NOT

IF YOU HAD FINISHED THE WAR as a Lieutenant of Infantry, and come home wearing the *Croix de Guerre* with a palm as a reward for unusual bravery in action; if you had been gassed, and badly wounded with shrapnel, and afflicted with tuberculosis on top of that; and if the Government threatened to cut off your pay and turn you, still uncured, out of its hospital a year after your return from abroad, merely because you didn't happen to be an officer of the regular Army, ——— under all those circumstances you might write a little *résumé*, of your experiences like this which has just come from an officer-patient in the Government Hospital at Oteen, N. C. He divides his review into three scenes:

> Scene 1—1918—"Star-Spangled Banner" and loud cheers.
>
> Scene 2—1919—Welcome home soldiers, sailors, and marines! We can't do too much for you!
>
> Scene 3—1920—Good-by, you disabled and diseased. You have made the Army safe for the regulars.

The difference in the treatment accorded to disabled men, dependent on whether they were members of the regular Army or of other branches, seems to have been brought to a head by a general order, well and unfavorably known among American officers who are still hospital patients, under the name of "Circular Letter No. 345." It provides that "all disabled military personnel, except officers of the permanent Army and those requiring multiple operations or special surgical treatment, or suffering from mental diseases, shall be discharged one year after admission to a hospital in this country. Provided individuals too sick to be removed from hospital without prejudice to their life or recovery or who, upon question of discharge being submitted to them in writing, certify that they can not provide for the necessary care and attention for themselves, shall be retained until the War-Risk Bureau, Soldiers' Home, or National Home for disabled soldiers are able to receive them."

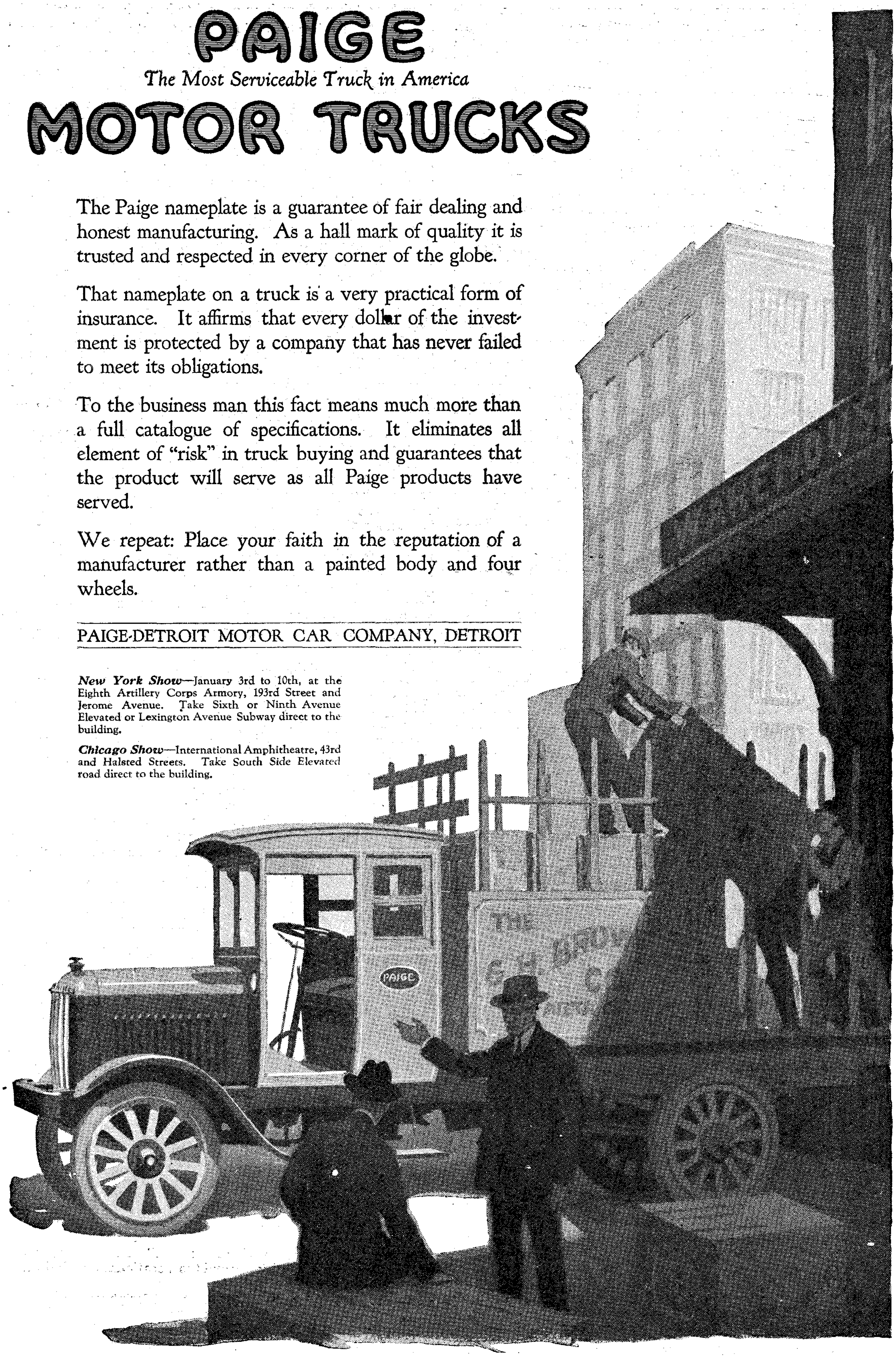
This order will throw some of the officer-patients dangerously ill with tuberculosis at the Oteen Hospital on the tender mercies of the War-Risk Bureau, or one of those "soldiers' homes" which the officers seem to look upon as little better than almshouses. Their pay will be cut off. The compensation which is legally awardable by the War-Risk Bureau is "notoriously insufficient," in the words of one of the patients. Practically this same admission was made by the Bureau in a communication published in THE DIGEST for December 20. Efforts are being made to increase the allotments, but without much prospect of immediate success. "The majority of officers in these hospitals are men with families," writes one of them in a recent letter to Representative Kelly, at Washington. "They will have their means of livelihood taken away from them by this discrimination. Medical experts declare several years are required to effect a cure for tuberculosis, and that it is ridiculous to treat a patient at Oteen a year and thrust him out on the idea that he is convalescent. The new policy is a direct contradiction to those orders which provide for no discrimination between the various branches of the service, in that it shows such discrimination, allowing only the regular Army officers, including the Provisionals, most of whom have been in the service only a short time, the benefits of maximum cure on full pay and allowances." The whole matter of discrimination between regular officers and National Guard officers, Reserve officers, and temporary or emergency officers is taken up by the Macon *News* under the heading, "Correct this Injustice." To quote:

> Any claim that the United States entered the Great War in the name of humanity, and more specifically that it was a war in the interest of democracy, will have been discredited for all time unless the Government proves its humanity and democracy at home by placing the regular Army officer and those who were temporarily commissioned from civil life on the same basis in the matter of retirement because of disability.
>
> There are now pending before Congress two bills, more or less similar, one of which must be enacted into law if we are to avoid this deep and lasting disgrace, and strange as it may seem the outcome is doubtful not because of negligence or inertia in Congress, but because there is active opposition to these measures from some sinister source, the nature of which it seems impossible to discover.
>
> At the beginning of the war, our military program was in a most unsettled state as to the organization of our forces, and this resulted in a mixture of commissions for officers.
>
> 1. Regular Army Officer. These are officers holding permanent commissions in the permanent military establishment.
>
> 2. National Guard Officers. Officers commissioned in the National Guard organizations of different States and who were called into active service with their troops.
>
> 3. Reserve Officers. Men from civil life who undergo a certain training period previous to being commissioned and who are commissioned for five years, subject to call to active duty at any time.
>
> 4. National Army Officers. Officers commissioned from civil life for service with the National Army during the war.
>
> 5. Provisional Officers. Men commissioned from civil life and from the ranks of the Army, provisionally in the regular Army. They must serve a term in the Army and pass an examination before having their commissions made permanent.
>
> 6. Temporary or Emergency Officers. Men commissioned from the ranks and from civil life to hold commissions for the period of the war or emergency.
>
> Let it be noted that classes 2, 3, 4, 5, 6, are practically the same, that they underwent the same course of training, were drawn from the same sources, and that they were on a par in all service in the Army—and in all danger and hazard in the Army.
>
> But as a result of the hasty legislation which called the great American Army into being, we now find that the regular Army officer and the provisional officer are retired on three-fourths pay, while the National Guard officer, the reserve officer, the National Army officer, the temporary or emergency officer, disabled in line of duty, is absolutely barred from participating in the benefits of the retirement provision.
>
> All officers were exactly on the same footing. All stood the same chance of being killed or maimed for life—as thousands of each class were. They were all simply American officers, belonging to what the War Department itself officially designated as the American Army. But now that they have all done their duty alike, and thousands of each class have been disabled for life, there comes up a discrimination, and only the regular Army officer and the temporary officer in the regular Army can be retired with pay.
>
> A distinguished advocate of the legislation which would remedy this inequality says:
>
> "Without the retirement privilege for any one, the effect of disability incurred in line of duty or wholly destroying, as it would, their earning capacity in their chosen way of making a living; in one case the military service; in the second case, their civilian (prewar) occupation. But this is not the case; for the regular Army officer, after having in most cases been educated at government expense, is safeguarded both in the event of disability and old age and has also the privilege of retiring at his own request after a fixt number of years, whether of peace or war-service; whereas the temporary officer is entirely unprovided for in this respect, yet section 10, Act of Congress, approved May 18, 1917, provides: That all officers and enlisted men of the forces herein provided for, other than the regular Army, shall be in all respects on the same footing as to pay, allowances, and pensions as officers and enlisted men of corresponding grades and length of service in the regular Army. The War Department does not interpret this to place all officers on the same basis for retirement."
>
> As to how it works out in practise may be shown from a contrast taken from the records of one hospital, and from the same hospital there were found more than a dozen contrasts equally strong. Here is contrast No. 1:
>
> Captain A. Age fifty-seven. Six children. Contracting engineer. Commissioned temporary captain from civil life. Close confining work caused breakdown, followed by influenza. Developed pulmonary tuberculosis. Prohibited from reassuming professional work. Too late in life to start over. Means of making livelihood destroyed. Not eligible to retirement.
>
> Lieutenant B. Age twenty-three. One child. In school at outbreak of war. Commissioned lieutenant provisional. Attack of influenza followed by pulmonary tuberculosis. Unable to assume work of hard or confining nature. He has been retired on three-fourths pay.
>
> Can anybody claim even common justice for such a system? And yet it seems to find actual defenders in and around Congress.
>
> The American Legion should be, and probably is, a powerful force in bringing the facts before the general public. Moreover, there are undoubtedly instances of temporary officers disabled,

PAIGE

The Most Serviceable Truck in America

MOTOR TRUCKS



The Paige nameplate is a guarantee of fair dealing and honest manufacturing. As a hall mark of quality it is trusted and respected in every corner of the globe.

That nameplate on a truck is a very practical form of insurance. It affirms that every dollar of the investment is protected by a company that has never failed to meet its obligations.

To the business man this fact means much more than a full catalogue of specifications. It eliminates all element of "risk" in truck buying and guarantees that the product will serve as all Paige products have served.

We repeat: Place your faith in the reputation of a manufacturer rather than a painted body and four wheels.

PAIGE-DETROIT MOTOR CAR COMPANY, DETROIT

New York Show—January 3rd to 10th, at the Eighth Artillery Corps Armory, 193rd Street and Jerome Avenue. Take Sixth or Ninth Avenue Elevated or Lexington Avenue Subway direct to the building.

Chicago Show—International Amphitheatre, 43rd and Halsted Streets. Take South Side Elevated road direct to the building.

> but denied retirement with pay, in every community. This should bring the situation home to every town and countryside.
>
> The public should know the facts and the representatives in Congress should be told that they must do justice to the temporary officers who did their duty as faithfully as did the officers of the regular Army in the great tragedy of 1918.

The bills now before Congress, which were referred to the Committee on Military Affairs on June 25 last, provide "that any officer who has served in the military forces of the United States during the war with Germany and who does not belong to the regular Army shall have the right, provided they have incurred disabilities while in the service, in the course of the war, to be retired on the same terms and on the same compensation as like officers of the regular Army." The Atlanta *Journal* recommends the passing of this bill in an editorial entitled "A Grave Injustice That Congress Should Remedy." "Treat all officers alike," demands *The Daily Press*, of Newport News, Va. "Infamous discrimination," declares the Greenville (S. C.) *Piedmont*, and the Asheville *Times* comments and explains:

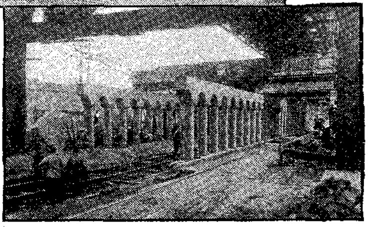
> It is only justice that officers who have suffered the loss of their health while in the national service should be provided some means of support when discharged with an incurable disease. All officers, whether from the regular Army, or commissioned in the temporary Army, were on the same footing as to work, duties, responsibilities, dangers, and risks. All advantages accrued to the regular Army officers, whose promotions were rapid because of their longer training. There was no discrimination among officers going into action; gas, shrapnel, bayonet, bombs, and disease found all alike. They suffered the same hardships, incurred similar wounds, were disabled by the same diseases.
>
> At the beginning of the war the military program was in an unsettled state, which resulted in the manifold character of commissions for the officers.
>
> The Navy retires its disabled reserve officers. The marine retires its disabled temporary officers. The Army retires its disabled regular and provisional officers, but has no such provision for those with commissions in the National Guard, reserve, national Army, and temporary officers.
>
> In a statement prepared by an organization of officers who seek to have all United States Army officers placed on the same basis of retirement, the following explanation is made of the failure of war-risk insurance or insurance and vocational training departments to work in their favor:
>
> "It is claimed that the war-risk insurance and compensation provides for the disabled temporary commissioned officer in lieu of retirement. In does not. In the first place, to draw the base compensation of thirty dollars per month, a single officer must be totally disabled. It matters not whether he be a second lieutenant or a major-general, the compensation is the same. No distinction whatever is made between a private soldier and a major-general, in the way of compensation. The compensation allowed bears absolutely no relation to the active service pay of an officer. It was based apparently on the pay of a private soldier as it corresponds (formerly) to very nearly three-fourths of the 'base active service pay and allowances of a private soldier.'
>
> "The war-risk insurance is equally open to all, rank and file as well as commissioned officers, of all forces, so this can not be said to take the place of retirement. It is a protection voluntarily assumed by the individual—and paid for.
>
> "The insurance bureau gives practically nothing, inasmuch as nothing can be obtained from it unless total and permanent disability exists, *i.e.*, loss of sight, limbs, or senses. In this connection, for example, it has been held by the War-Risk Insurance Bureau that an officer suffering from pulmonary tuberculosis incurred in line of duty, because he is still in possession of his sight, senses, and limbs, whatever may be the extent of his lung involvement, is not totally and permanently disabled, and, therefore, *not* entitled to insurance compensation altho, in many cases, work of any kind is out of the question, and the sufferer is all but bed-ridden.
>
> "Consequently it matters not, to a large majority of disabled officers, particularly those suffering from tuberculosis, what the war-risk insurance base compensation per month is fixt at—whether it is thirty, eighty, or one hundred dollars—so long as they are 'possest of their sight, limbs, and senses'—altho the general public is not aware of this fact. This, then, does not take the place of retirement."

Similar cases of discrimination have arisen in the Navy where, according to *The Army and Navy Journal*, "initial steps to compel the Secretary of the Navy to place on the retired list officers of the Naval Reserve Force physically disabled in the line of duty" have been taken through an appeal to law. It seems to be the opinion of the writer that this attempt to put all American naval officers on the same retirement footing will succeed. As he writes:

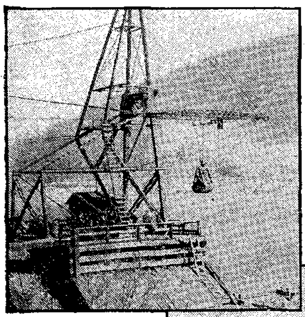
> This litigation was forecast by the Judge Advocate General of the Navy in an opinion rendered on legality of the order of October 29, in which it was stated that when an officer of the United States Naval Reserve Force is found by a board of medical survey to be unfit for further service, he shall be placed on inactive duty, and when such action is taken the officer concerned shall be informed in writing of the reason for the revocation of his appointment or discharge or for being placed on inactive duty, as the case may be. The officer shall also be informed when the disability is in line of duty that, pending adjudication of his claim for compensation by the Bureau of War-Risk Insurance, he may apply for or be retained for treatment in a naval hospital as a supernumerary patient.
>
> The Judge Advocate General of the Navy submitted a memorandum to the Secretary of the Navy early in November in which it was held that the Secretary's order of October 29 would "result in litigation against the United States which can not successfully be defended," adding: "I advise that action on this order be delayed in any cases to which it may be applicable until further investigation of its legality." Pointing out that retirement on the ground of physical disability incurred in the line of duty is mandatary in regard to the regular Navy, the Judge Advocate General states:
>
> "The laws relating to the retirement of temporary or reserve officers do not prescribe what system shall be followed in ascertaining the fact that an officer is incapacitated in line of duty. Under the order you have issued this fact is to be ascertained and reported on by a board of medical survey, and the case is not to be referred to a retiring board. Reference to a retiring board is not necessary under the law; the report of a board of medical survey may sufficiently establish the fact necessary for retirement. No matter how the fact is established, when it has once been officially ascertained and made of record in the Navy Department that an officer of the temporary Navy or reserve force is disabled in line of duty, his right to retirement under the law is fully established."
>
> The Judge Advocate General then quoted an opinion of the Attorney-General to the Secretary of the Navy on September 19, 1910 (28 Op. Atty. Gen., 417, 420), holding that paymaster's clerks in the Navy under former law "should be retired under the provisions of Section 1453, Revised Statutes, which provides for retirement of officers of the Navy for physical disability incident to the service. The opinion continues:
>
> "The laws relating to officers of the temporary Navy or Naval Reserve Force and Marine Corps Reserve plainly confer upon those officers the same rights of retirement for physical disability in line of duty as are given by law to officers of the permanent Navy and Marine Corps. They have been so construed by the department, and this construction has been acted upon in specific cases. When the officers who are deprived of their right to retirement under the above-mentioned order institute legal proceedings, as they naturally will, it will become the duty of this office, on the part of the Navy Department and of the Attorney-General as counsel for the Government in the courts, to defend the act required by said order. It is my opinion, as above stated, that such action can not successfully be defended. I also consider that it would be advisable before taking action which the Attorney-General will be required to defend in the courts, and which is at least open to gave doubt from a legal standpoint, to obtain an advance opinion of the Attorney-General upon the question whether or not such action may legally be taken. In view of the foregoing it is recommended specifically (1) that action under the above-mentioned order be delayed pending further consideration of the legal points involved, and (2) that the Attorney-General be asked for his opinion as to the legality of the aforesaid order."
>
> The Secretary of the Navy had this matter of application for retirement under consideration for months, but two days before issuing the order he had in hand a memorandum from the Surgeon-General of the Navy, in which the latter states that "in view of the large number of temporary and reserve officers who are being surveyed for physical disability rendering them unfit for the service. . . . it would appear desirable to recommend that such officers be disenrolled or their appointment be revoked, as the case may be, with a view to placing them in a status (discharge or resignation) wherein they can apply for compensation under the War-Risk Act." After quoting the provisions of the War-Risk Act and the Vocational Rehabilitation Act, the Surgeon-General of the Navy says: "The right of officers of the regular service to retirement for physical disability does not seem to have been touched upon or repealed by the War-Risk Act. It is, therefore, considered that the intent of Congress was to provide for all commissioned officers of the

Building on a Concrete Foundation

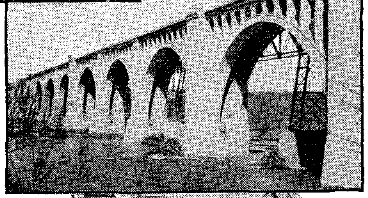
Buildings Designed, Fabricated and Erected for Standard Shipbuilding Corporation.



Colonnades cast in Blaw Steel Forms. Illinois Central R. R. Track Elevation, Chicago.



Blaw Single Line Clamshell Bucket operated by unskilled labor on an automatic Single Rope Cableway.



The James River Bridge at Roanoke, Va. Blaw Arch Ribs were used

Stone and Webster used Blaw-forms on this huge concrete wall for the Brier Hill Steel Co.

A foundation of principles, not products. Where construction methods could be improved, there Blaw-Knox Company took hold and set out to approach the perfect.

The Blaw-Knox business was not founded on the mushroom principle.

Knowing that wood-forms were costly, inaccurate and awkward, Blaw-Knox Company tackled the field of concrete construction.

Today Blaw Steel Forms are used in all corners of the country. They have materially aided in accomplishing projects from the construction of roads, sidewalks and buildings to such feats as the Panama Canal and Catskill Aqueduct.

When Blaw-Knox Company investigated and discovered that the terrific heat of high-temperature furnaces was hindering work and harming materials, Knox Patented Water-cooled Appliances were the outcome.

For carrying high-tension lines, Blaw-Knox steel transmission towers, which stand their ground and withstand the elements, were designed, built and erected.

And still another conquered field: Blaw Clamshell Buckets are known to countless contractors and industrial plants as the ideal method of excavating and rehandling.

In designing equipment, no obstacle is side-stepped. Blaw-Knox Company takes the hardest route when necessary. Its service is unlimited.

BLAW-KNOX COMPANY, Pittsburgh
Offices in Principal Cities

These products are built and trade-marked by Blaw-Knox Company

BLAW STEEL FORMS for all kinds of concretework—sewers, tunnels, aqueducts, dams, culverts, bridges, retaining walls, factory buildings, and warehouses, columns, floors, foundations, manholes, subways, reservoirs, piers, roads, sidewalks, etc.

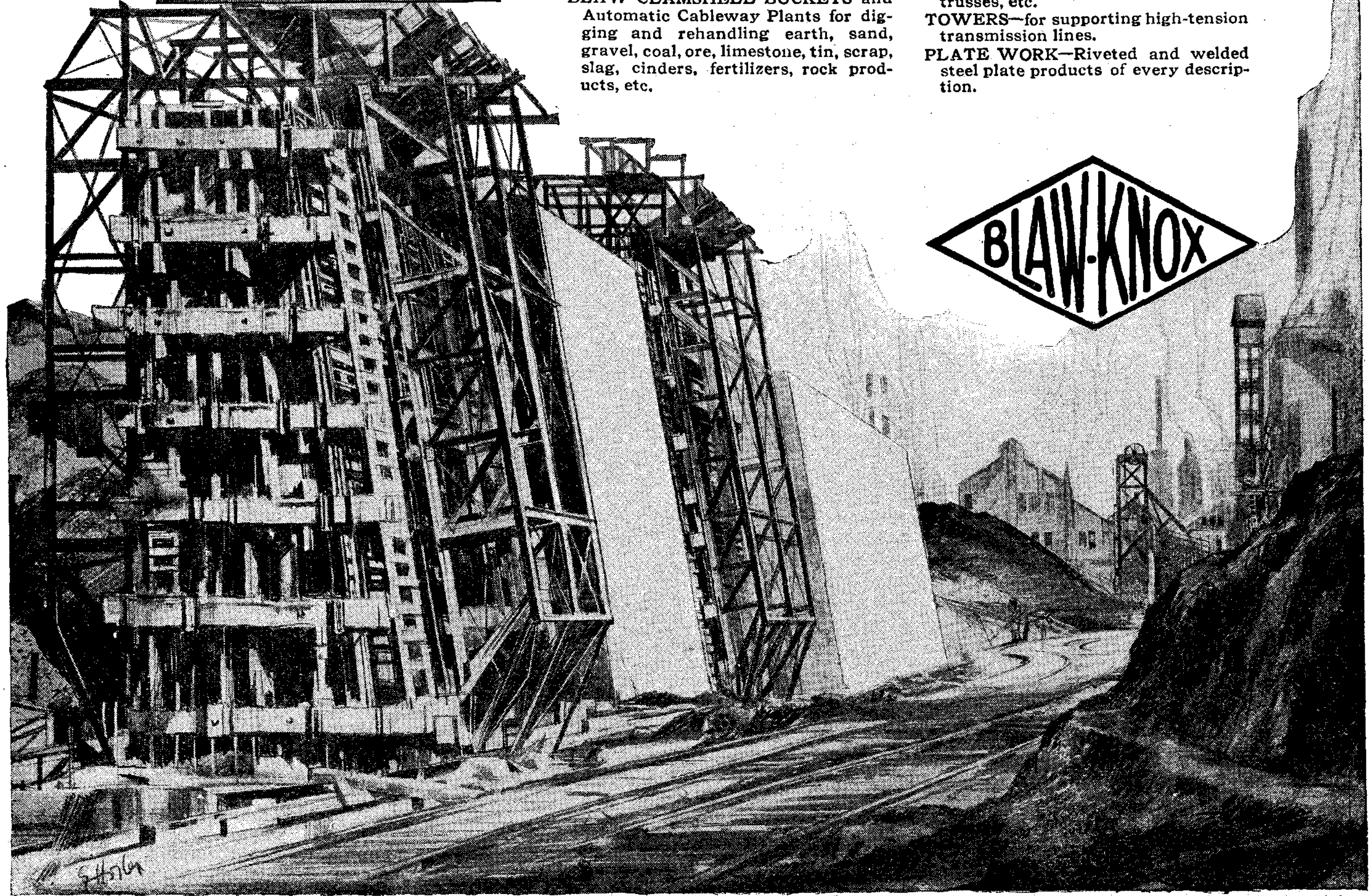
BLAW CLAMSHELL BUCKETS and Automatic Cableway Plants for digging and rehandling earth, sand, gravel, coal, ore, limestone, tin, scrap, slag, cinders, fertilizers, rock products, etc.

KNOX PATENTED WATER-COOLED Doors, Door Frames, Ports, Bulkheads, Front and Back Wall Coolers, Reversing Valves, etc., for Open Hearth, Glass and Copper Regenerative Furnaces, water-cooled standings, shields, and boshes for Sheet and Tin Mills.

FABRICATED STEEL—Manufacturing plants, bridges, crane runways, trusses, etc.

TOWERS—for supporting high-tension transmission lines.

PLATE WORK—Riveted and welded steel plate products of every description.



BLAW-KNOX COMPANY

regular Navy and Marine Corps, nurses, and for all enlisted men of the regular, temporary, and reserve Navy and Marine Corps in the War-Risk Act a substitute for previously authorized gratuities or pensions." The Surgeon-General recommended that as his bureau was assuming for administrative purposes an intent of Congress his memorandum be referred to, the Judge Advocate General for opinion. He also recommended that "until a definite decision is made as to whether or not officers should be retired or should be placed in a status wherein they can apply for compensation under the War-Risk Act, all cases awaiting decision as to retirement to be held over for the present."

In connection with this memorandum of October 27 of the Surgeon-General a letter written to a member of Congress from his office in the Navy Department on September 29 stated that the policy of the Navy Department was "that all reserve officers who have been injured in the line of duty, according to interpretation of law, are entitled to appear before the United State Naval Retiring Board for further disposition."

Of the more than 32,000 officers of the Naval Reserve who served during the war, it is stated that less than one hundred have applied for retirement on the ground of disability incurred in line of duty.

Secretary of War Baker, on July 17 last, wrote that the problem did not seem to him "how to apply to temporary officers a law which was designed to meet the needs of a permanent service, but rather to determine what changes, if any, are required in the War-Risk Insurance Act in order to provide adequate compensation to all disabled officers and enlisted men who come within its provisions." It is freely charged by the officers who are working to have the provisions covering regular Army retirement widened to cover all officers, that the War Department's objection is based on financial considerations. Secretary Baker's explanation of the Department's attitude, presented in a latter to Julius Kahn, Chairman of the House Committee on Military Affairs, runs as follows:

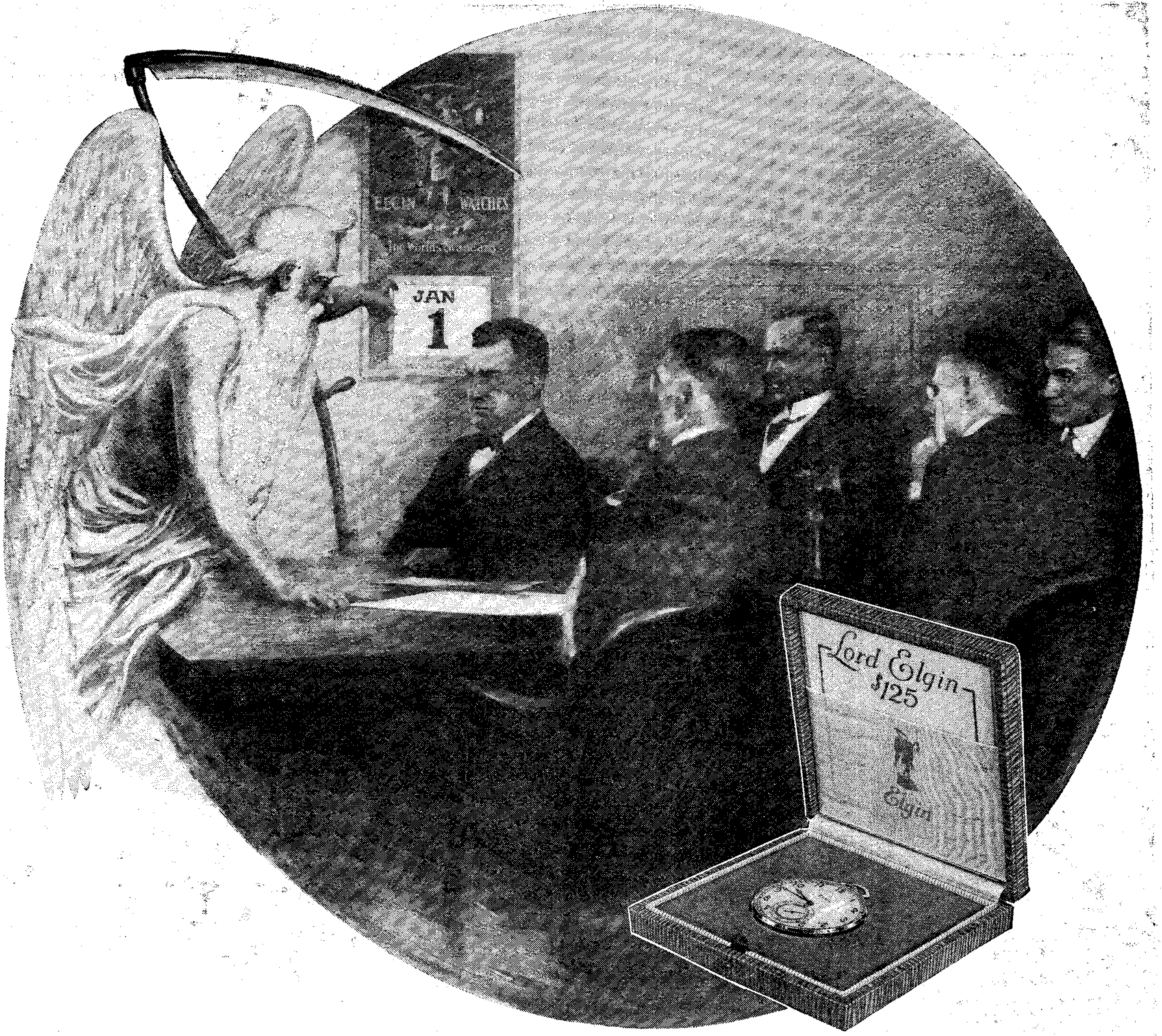
> The law which created the retired list is of long standing and is operative both in peace and war. Without it there would be but little incentive for a young man to sever all local affiliations, give up all hope of creating for himself and family a permanent home and business or professional connections in civil life, and devote his whole future to a profession which in most of its aspects does not fit him for civil pursuits.
>
> A retired list for the regular Army is a matter of vital necessity. It was found necessary in order to provide adequately for those officers who have reached the age when they are forced to retire from active military service and for those who suffer disability in line of duty which incapacitates them for further active service. It applies only to those officers who enter the Army without thought of returning to civil life and who give their vigorous years to military service. Army life and its requirements are such that officers have no opportunity to accumulate anything substantial in the way of savings. They are subject to frequent changes of stations, many of which involve heavy personal expenses. They are unable, as a rule, to make investments or to devote the time thereto which is necessary for their protection. They are frequently separated from their families and required to maintain two establishments. The cost of educating their children is always higher than it is for people having a fixt abode and dependable school facilities. Their pay is not large, but they are expected to maintain an appearance and live in a manner befitting officers of the United States who are frequently required to act in a representative capacity and to meet and entertain the representatives of foreign states. As a result of all these things most officers reach the age of retirement without having been able to lay aside much, if anything, to live upon during their remaining years. They are then too old to take up new work and usually find nothing for which they are suited. The same provision is made for those who suffer disabilities, which unfit them for future active military service, that is made for those who reach the age limit for retirement, and this is obviously correct in principle, for in many cases the man who is so disabled as to have to leave the military service is under a great handicap in civil life, for which his retired pay is no more than adequate compensation.
>
> If these provisions were not made for regular officers it is clear that the best type of men, those who are especially desirable in our military service, could not be expected to devote their lives and abilities to a service which has such limited possibilities in the way of personal rewards.
>
> The same argument can not, of course, be made for extending the benefits of the retired list to the officer whose service is but temporary and who, at the conclusion thereof, expects to return to his home and to his established profession or his customary vocation. Usually such a man enters the service from most commendable motives of patriotism. He serves because his country, for the time being, is in need of his services, but he does not bind himself to continuous service and obligation. When he is discharged he may expect to return to his former pursuits with the assurance that he may remain there undisturbed, to work, for the accumulation of means to provide for his declining years. Ordinarily he has business connections and experience established or acquired before the war which are an asset to him after the war. If disabled while in active military service, the temporary officer should, of course, be provided for in a manner commensurate with his disabilities, but it is not believed that in order so to provide it is necessary or desirable to establish for him a retired list such as is shown above to be essential in the maintenance of an efficient regular Army.
>
> In the case cited of two officers who get their commissions at the same time, one of whom goes into the regular Army and the other into the temporary forces, and both of whom sustain similar injuries, incapacitating them for future military service, it is true that the regular officer becomes entitled to a higher compensation than is provided for the temporary officer. It may be that the compensation allowed the temporary officer is insufficient, but this does not prove that the reservation of the retired list of the Army for regular officers is unsound in principle. In this connection it should be remembered, however, that out of 6,154 men commissioned in the regular Army since the declaration of war, only eleven (less than 2/10 of 1 per cent.) have been retired for disability. Thus the apparent inconsistency in the laws as applied to the officers commissioned during this war is found to be so small as to be relatively unimportant.
>
> It seems to me that the problem is not how to apply to temporary officers a law which was designed to meet the needs of a permanent service, but rather to determine what changes, if any, are required in the War-Risk Insurance Act in order to provide adequate compensation to all disabled officers and enlisted men who come within its provisions. This act did not originate in the War Department, nor is it administered from this office. While I am by no means indifferent as to the manner in which it operates, I do not feel justified in expressing any views on the subject until experience has shown its provisions to be inadequate.

In the opinion of many of the men affected, these provisions have already been shown to be not only "inadequate," but also capable of working downright injustice. "In the new army that will be built up it will be rather difficult to get men of the proper caliber to take commissions," commented a lieutenant who acquired tuberculosis in France, "if this feature of retirement is not extended to the American army officer. No man will care to go into active service, leaving his family unprovided for while there, or even to maneuvers where he is liable to injury or fatal sickness."

Among the resolutions adopted by the American Legion at its recent meeting in Minneapolis was one (Number 8), recommending "that Congress place all ex-service men on the same basis as to retirement for disability as is enjoyed by members of the regular Army."

In an issue of *The American Legion Weekly*, somewhat later than the one which carries this information, there is a strong editorial urging action by Congress upon the Legion's various resolutions, among which the one just quoted above is numbered. "Action is expected," declares the writer in the issue of December 5, and comments:

> "Congress apparently has elected to cogitate upon beneficial soldier legislation until it has had a rest. The question of homes, of a bonus, of farms, of a military policy conforming to American democracy, of expulsion of alien slackers, and of governmental reforms and adjustments—these matters have been before Congress and the country long enough to admit of a decision and of definite action. The American Legion has a right to expect that such action will have the right of way when Congress settles down to business again. The American Legion will be justified in insisting, so far as it is able to insist, that something definite be done."



"*Your Biggest 1920 Asset is TIME!*"

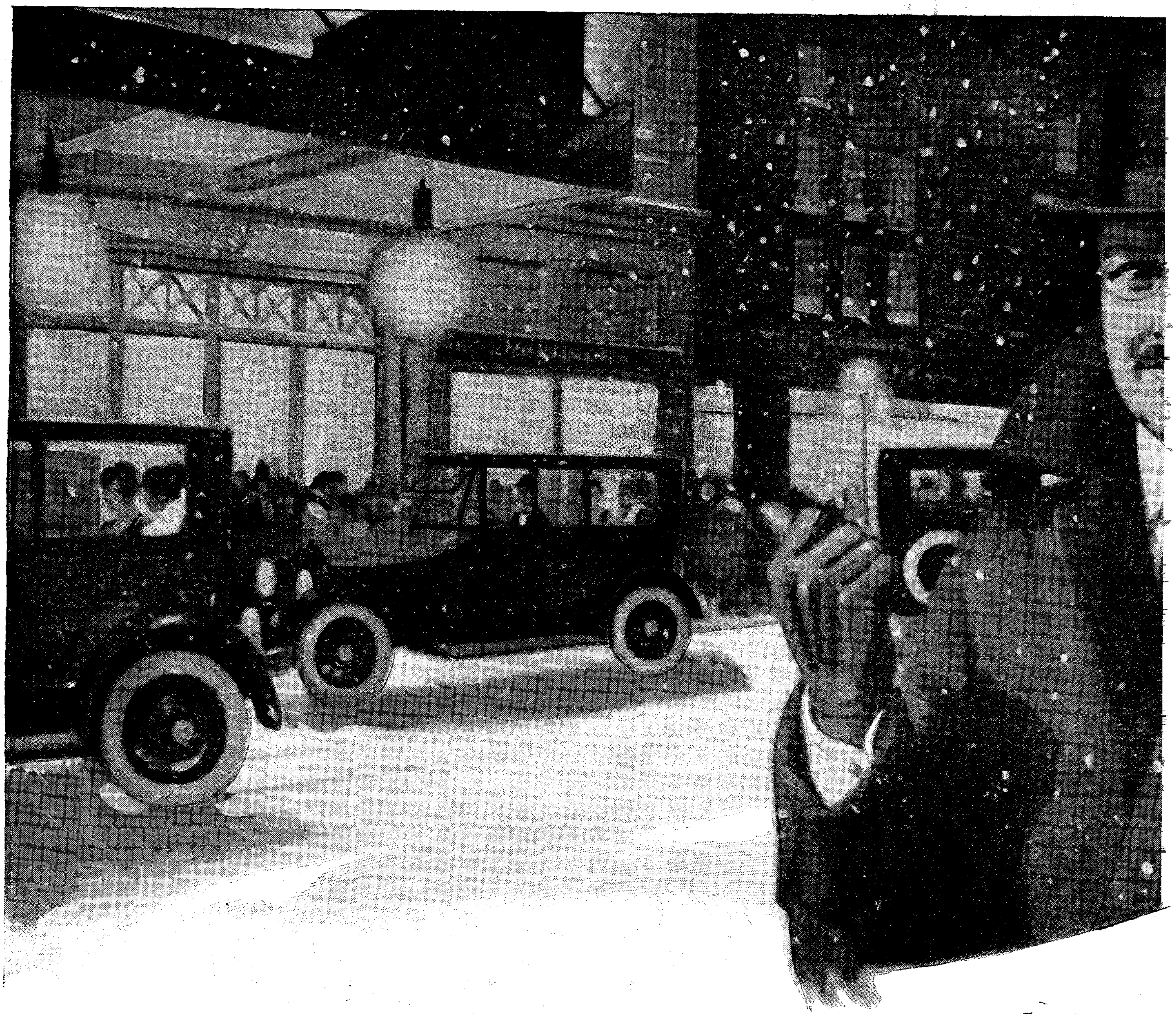
My friends, the success of all your plans for the New Year hangs on one thing—the way you invest your *Time*.

In one respect and only one, all men are equals: every day I deposit to each man's credit 1,440 freshly minted minutes—to guard or lose—to waste or use.

The costliest draft the New Year can draw against you will read, "Pay to the order of *Lost Time*."

Elgin Watches

Guard Your Time

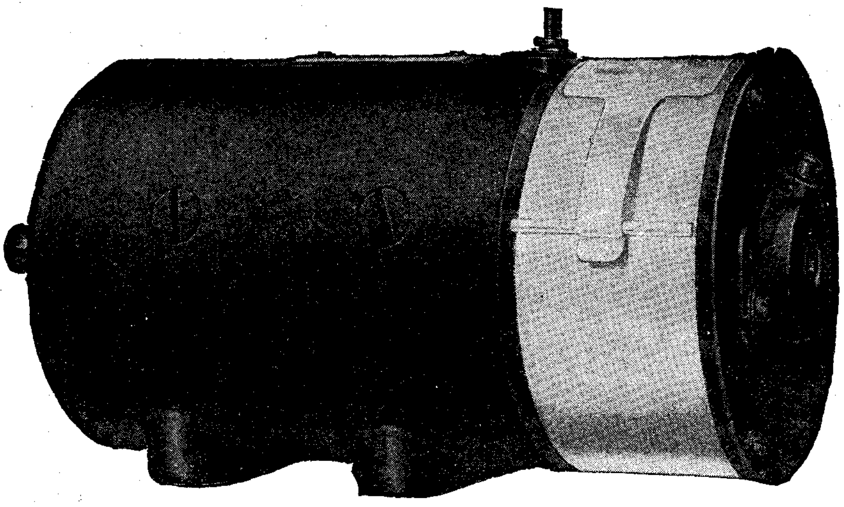


In the perf
Starting Lig
day to day w

The Wagne
the first touc

His Wagner
put according

Thus, at us
generator is



Facto
Buff
St. P

W

Wagner Quali

ʽhe Made-to-Order Electrical System

its three-fold function, the Wagner
ɔn System serves the car owner from
·ıcy that knows no exception.

·ıks his car quickly and properly—at
ting pedal.

unctions faithfully—gauging its out-
s of the moment.

peed—18 to 22 miles per hour—his
ts maximum current and, at higher speeds, when driving is sustained, the current is automatically reduced to prevent overcharging the battery.

Wagner Lighting is also unfailing—always sufficient for every need.

All this results from forethought in the making—from following the Wagner principle of "made-to-order." Every Wagner System is built to meet the individual requirements of the particular car of which it forms an essential part.

If you are considering the purchase of a motor car, make sure that it has a Wagner Made-to-Order Electrical System.

Wagner Electrical Manufacturing Company, St. Louis, U. S. A.

·enance Stations:
sco Milwaukee
* Atlanta
* New York
Cincinnati
* Chicago
* Los Angeles
Montreal
* Philadelphia
Washington, D. C.
Toronto
* St. Louis
* Minneapolis
* Boston
* Cleveland
* Kansas City
* Pittsburgh
* Detroit
* Indianapolis
* Seattle

Selling Agencies:
New Orleans Salt Lake City
Memphis Dallas

gner, Quality

ˎRTING LIGHTING IGNITION

THE STARTER THAT IS BUILT TO ORDER

DR. CARREL, AMERICAN SURGEON, IN PEACE AND WAR

IT was the often-exaggerated reports of his research and experimental work in surgery that appeared in the newspapers that made Dr. Alexis Carrel's name familiar to the average reader in this country. But if he was thought of, somewhat vaguely, as a theorist, or a doctor who did some remarkable surgical "stunts" in the way of transferring parts of one anatomy to another, it is now known that his work in France in applying the results of his laboratory work at the Rockefeller Institute for Medical Research, has saved the lives and alleviated the sufferings of thousands of wounded soldiers. A writer in *La France* tells us that—

> His laboratory hospital was located at Compiègne. Driven out of that town by the German advance early in 1918, Dr. Carrel transferred his operations elsewhere and was again actively at work when the armistice came.
>
> Nobody knows how many thousands of hours of suffering were saved by the Carrel-Dakin method of cleaning and draining wounds. There will always be more or less discussion of everything of this kind in the medical profession, but the wounded man and the layman who saw anything of war-hospitals in France can not be made to believe that the Carrel-Dakin method is not a huge success. What Dr. Carrel accomplished in fighting wound-infection, which was almost universal in the early days of the war, is an achievement no doubt shared by others, but probably no one did more than Dr. Carrel to reduce wound-sepsis to a minimum.

One of Dr. Carrel's associates at the War Demonstration Hospital gives the following impression of him:

> Amazing vitality is the overpowering impression of one meeting Alexis Carrel for the first time. Of less than medium height, compactly built, erect, and graceful, the great surgeon gives a suggestion of youthfulness, strength, and power. His mobile, clean-shaven face is accentuated by the baldness of his head. Thin, firm lips, tightly shut, would be almost stern were it not for an ever-lurking smile that illumines his countenance even in serious conversation. Behind the eye-glasses, there gleam two remarkable eyes, one a violet blue in color, the other of softest dark brown. The thin straight nose shows the keenness of the scientist.

Reviewing Dr. Carrel's career, and also that of Madame Carrel, the writer proceeds:

> Dr. Carrel is still young and looks younger. He was born at Sainte Foy-les-Lyon on the 28th of June, 1873, and obtained his first degree from the University of Lyons in 1891. From 1896 to 1900, he was interne at the Hospital of Lyons and, from 1900 to 1902, a professor of the faculty of medicine of the University of Lyons. Fortunately for the United States and for the world, Dr. Carrel came to New York in 1905 and soon became identified with the Rockefeller Institute for Medical Research. With the resources and freedom obtained in the Institute, he has been able to accomplish those wonders which secured for him, among other honors, the Nobel prize in 1912 for his work in suturing blood-vessels and transplanting of organs.
>
> Madame Carrel is herself a trained investigator and a surgeon of no mean ability. As Anne de la Motte she was a laboratory student of the distinguished French surgeon Tuffier, when she married the Marquis de la Marie. Soon after she was widowed she resumed her laboratory work in a Paris hospital. There she met Dr. Carrel and became his laboratory assistant at his hospital at Lyons. They were married in 1913. Madame Carrel accompanied Dr. Carrel to France in 1914, and the outbreak of the war found them there. He at once entered the French Army Medical Service as a major and soon established the Compiègne Hospital, Madame Carrel continuing to assist him.

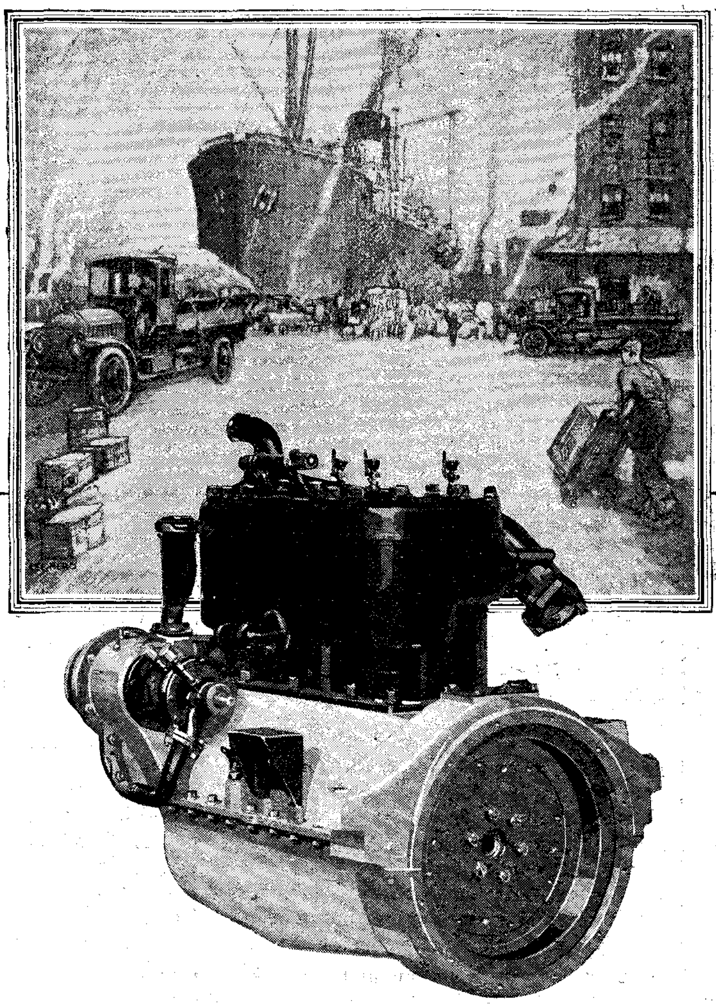
STONEWALL JACKSON, MILITARY GENIUS OF THE CONFEDERACY

PEOPLE of that Southland for which he fought and died erected not long since a monument to Stonewall Jackson, next to Lee the most beloved and admired of Confederate leaders. His aids, who stood beside the dying leader, had the forethought to mark the spot where he "sank down in the twilight of the Wilderness," and after the war they put boulders there, and later a simple monument. It stands there now, away from travel and beyond the Chancellor house. The cross-roads to the Bloody Angle lies also to the rear. The spot, in very truth, says the Richmond *News Leader*, "is the end of the field, on the far border of the campaign that will live longest to exemplify the military genius of America." To this Richmond newspaper we are indebted for the following fine appreciation of one of the greatest of American generals and gentlemen:

> The instinct of a race—surer guide than the conclusions of historians—has placed Jackson there, enshadowed, apart, with a genius never fathomed and with powers never displayed in their fulness. He was the Extended Flank of Attack. His cannon thundered beyond the main army, beyond the enemy, in the distance, in the unknown, in the future of military science.
>
> The loving sketch of his widow, the pioneer labors of Dabney, the faultless study of Col. William Allen, and the matchless military biography of Henderson have made Jackson far less mysterious than he seemed to his soldiers in 1862. His deathless "foot cavalry" would see him lift his arm as he rode in the darkness at the head of his column. They would sometimes hear him talking to himself. They would see him on the field, ablaze with the fire of battle, unrecognizable as the diffident man of the camp. They would follow him over mountain trails or through the midnight till they met the enemy and then, the battle won, they would read that "old Jack" had achieved the impossible in war. No wonder their admiration was mingled with awe. No wonder the more ignorant of them believed him possest—"plumb crazy," in the homely language of the bivouac. We know to-day, of course, that except in the hour of planning or in the moment of attack, Jackson was simply an intelligent, devout gentleman with a touch of Calvinism in his soul, but not without some qualities as gentle as those of Lee and almost as magnetic as those of Stuart. He had dignity without austerity, piety without cant, mercy without pretense. In his intercourse with friends, he was quietly human; in his relations with his family, he was affectionately faithful.
>
> But if time and discerning biographers have destroyed the myth that surrounded Jackson the man, time and the development of the strategy displayed by himself and Lee have, in some sense, made more pointed the questions his followers used to debate in the winter of 1862–63 around Moss Neck: Along the Shenandoah he commanded scarcely more men than some colonels had under them in the European War—would he have been as great at the head of the Army of Northern Virginia as in command of the Army of the Valley? He won the May campaign—that text-book perfection of strategy—unaided, unadvised; but he was for the rest of his life, except at Cedar Mountain, under Lee: Would he have been as successful without Lee as with him? And if he had been at Gettysburg—but that old question is one that can not be answered, and need not be asked.
>
> The test of any commander's genius is the soundness of his strategy, the practical wisdom of his tactics, the control he has of the moral forces of combat, and his spirit and inspiration upon the field of battle. Beyond this, it is impossible to say whether any soldier would or would not have succeeded. But applying this test, one need only read Henderson's microscopic study of every phase of Jackson's strategy to see that the famous commander mastered virtually every one of the elements that make up the compound of strategy. Select any essential of sound strategy and you will find it illustrated perfectly in one or another of Jackson's campaigns. Even those strategic niceties that one would expect only in a soldier drilled in the detail technique of war appear to perfection in Jackson's military operations. It is our conviction that the extent to which he acquired all this from a study of military history has been exaggerated. It would have been inconceivable that a man who had taught "military science" should not have learned, as Foch did, from having to teach. But there are reasons—too lengthy and detailed to enumerate—that make us believe Jackson's strategy was essentially the product of his own "military sense." And military sense is a definite quality, however much the psychologists may deny. In his tactics, Jackson was as sound as in his strategy, and is less known as a tactician primarily because he has been eclipsed by his own strategy. Even Henderson, we are of opinion, failed to appreciate the excellence of Jackson's tactics, especially in his disposition of his artillery. As for the mastery Jackson had of his men, it is useless to dwell upon that which has become proverbial. There merely remains, in summing up the qualities of leadership this remarkable man possest, to point out his bearing upon the field of battle.

Only three times, in the opinion of this writer, was there ever a question that the plan Jackson had matured, the tactics he was employing, and the moral hold he had upon his men were endangered by his lack of self-mastery or quick thought. One case was at Kearnstown—but that was for an hour only. The second was at Old Cold Harbor, "where he was strangely passive when he should have been afire." The third at Cedar Mountain—"not as some are disposed to say at White Oak Swamp—where he seemed to battle as hard with himself as with his enemy." Elsewhere, we read:

> Sound strategy, effective tactics, and



In every line of automotive work today, some one of the ten models of Buda the Engine is demonstrating its special ability to move the load at the speed required.

Whatever the particular Buda specified to the transportation need, it is built to work day in, day out, in the hands of all kinds of drivers, with a minimum of time out for repairs and at Buda's low standard of operating cost.

The latest features of Buda design and construction as embodied in this complete line of engines will be on view for inspection and study at the New York and the Chicago Automobile and Truck Shows.

They represent the proved engineering and perfected workmanship of 38 years' manufacturing experience, as well as the operating approval of eighty-five of America's representative makers of automotive products equipped with Buda the Engine.

THE BUDA COMPANY, *Harvey* (CHICAGO SUBURB), *Ill.*
ESTABLISHED 1881

BUDA
The
ENGINE

definite moral mastery were made kinetic in victory by his quick decisions, his confident bearing, and his ability to meet the unexpected upon the field of action. Where will one find the modern doctrine of elastic defense more perfectly exemplified than by Jackson's lightning-like changes of front in the valley? Where did military genius ever shine more brightly than on that little pine-sheltered knoll where, sitting on cracker-boxes, Lee and Jackson worked out that perfect plane for Chancellorsville?

Jackson, in short, fulfils all four of the supreme tests of leadership. And as we can do nothing more, in making an estimate of his military genius, than to measure his achievements in his reaction to successively larger responsibilities, it seems to us that the upward gradient from the valley to Second Manassas, to Sharpsburg and to Chancellorsville, indicates that if Jackson's life had been spared the gradient would still have been upward to the end. Were it not for the Seven Days' fight and Cedar Mountain, we should say unhesitatingly that if Lee, instead of Jackson, had fallen at Chancellorsville, the remembered glory of 1863 and 1864 would still be ours. The outcome would not have been different: The genius of defense would scarcely have been less.

And shall we say that the two campaigns we have named disprove utterly what everything else indicates? Who knows? The criticism directed against Jackson for his failure to achieve success in June and early July, 1862, has been wide of the mark. It can be demonstrated, we think, that the exhausted Jackson, leading a weary little army through an unfamiliar country, to which the men were not acclimatized, could not have moved faster than he did in Hanover. The mistakes he made were almost inevitable: Let those who hold a contrary view draw on the map the comparative marches of Jackson, Longstreet, and Hill as arcs of concentric circles. Let them measure these arcs and then let them speak. Let those who puzzle over Jackson's delay at White Oak Swamp visit that wretched bog in rainy weather and say how Jackson could have crossed it in the face of Federal artillery. If Jackson failed during those critical months, it was physically, and hence perhaps mentally, temperamentally, and not strategically. And in that failing is to be read the one interrogation-point opposite the questions a generation has been asking. No man who commanded the Army of Northern Virginia—or any Confederate army after 1862—could hope to solve these equations in military terms alone. Individualism run mad, politics, wounded sensibilities, State rights, the morale of the people—these things required that the successful commander should be as great a diplomatist as he was a soldier. That Lee was else for all his transcendent genius, he could not have kept the army together. A diplomatist Jackson was not, and hence we can not believe he would have weathered the storms of 1864 had Lee, instead of himself, fallen at Chancellorsville.

No Southerner can fail to see the significance of the state of mind that makes it possible thus candidly to discuss the comparative qualities of Lee and Jackson. So perfectly were the two men devoted, each to the other and to the common cause, that jealousy was never aroused, even during the days of war, when they were measured side by side. To-day that same devotion is shown, in the happiest form imaginable, by the selection of the only male, lineal descendant of Lee to deliver the address at the unveiling of the monument to Jackson. "Marse Robert" would have had it so! As long as there is a South, let the conduct of these two men be an inspiration to unity of purpose, of service, and of ideal! There was a time, perhaps, after the bitter disappointment of Malvern Hill, when Lee may have asked himself some questions concerning Jackson. It may have been consideration for Jackson that prompted him to delay and then to present in brief form his report of the Seven Days' Battle. But if these be more than the imaginings of historians—what a blessing it is that they may now be mentioned as frankly as the failure of husband and wife to understand the peculiarities of each other during courtship. The brave, generous opinion given by Lee of Jackson, when Davis asked him to nominate two lieutenant-generals in October, 1862, was well weighed and richly deserved by Jackson's behavior at Second Manassas, at Harpers Ferry, and at Sharpsburg. Thereafter, to the end, Jackson would have followed Lee blindfold, as he once said, and Lee would have trusted him with the army in any action. It is not in the familiar correspondence after Jackson's wounding, nor in the message Lee sent the sufferer at Guinea's station, nor in the order he issued the army after his lieutenant's death that Lee's real feeling toward Jackson is to be read. If this generation would know how the heart of Lee was smitten, let readers turn to the story of that grim dawn when hurrying aids broke on Lee's long-delayed sleep to bring him that dismal news. For once that man of absolute self-mystery was overwhelmed, and tho he kept saying he hoped the wound was not serious, those who looked at him saw the glorious old chieftain grow grayer still before their eyes. It was dawn, but it should have been twilight. It was the twilight of the Confederacy.

THE NEW GOSPEL FOR INDUSTRY ACCORDING TO MANUFACTURER CALDWELL

LABOR reconstruction is in the air. The gospel according to one large manufacturer, R. J. Caldwell, president of the R. J. Caldwell Company, manufacturers of cotton fabrics at Peacock Point, Long Island, begins with the following text: "In our various cotton-mills we have long held to the theory that our principal products should be happy, prosperous men and women first, and good cotton-cloth second." Experience, adds Mr. Caldwell, in the New York *World*, has proved that contented operatives automatically insure good cloth. He continues his exposition of good cloth and good workers:

> It seemed to me necessary, if we were to have contented employees, that we should know what was necessary to make employees contented. By a simple process of reasoning, the logical thing seemed to be—to ask them what would contribute to their contentment.
>
> It has occurred to me at times that mistakes have been made in some doing the thinking for others that the others were perhaps better able to do for themselves.
>
> Therefore, I sought to learn the wishes of my employees by the simple process of asking them to meet me in friendly council.
>
> In that simple act I learned a lesson which probably other employers have also learned.
>
> I learned that I was not a free agent to talk to my own operatives.
>
> I learned that in seeking close communion with our own employees I was trespassing upon the preempted preserves of our superintendents, who felt it a prerogative of their position to speak for those under them. They desired that they alone should be the means of communication between the employee body and the management.
>
> They desired to be the interpreter to each of the thought of the other.
>
> Thus, everything communicated by this means became colored by the views of the superintendent involved, and his views were often reactionary.
>
> The communities in our mills were little kingdoms wherein the superintendent was a czar, maintaining a strict censorship, suppressing all self-expression on the part of the workers, preventing the intrusion of any progressive thought to them, save such as the superintendent personally approved of.
>
> And this is characteristic of most employee bodies, I believe, and this, in the leading democratic nation of the world.
>
> That we permit this seems proof to me that industrially we are despotic, tho politically we aim to be democratic.
>
> Is it not true that we employers have given scant thought to the welfare of our workers? Have we concerned ourselves overmuch about their working conditions? Have we not as a rule resisted every effort they have made at self-improvement? Have we not failed to adopt safety appliances and then resisted employers' liability acts?
>
> Do many of us not still endeavor to defeat the workers' organization into unions for their own protection? And can they successfully meet organized capital without organized labor?
>
> Do we not strive to pay labor as little as possible, and then discharge them *en masse* in times of slack demand, regardless of the dire consequences to the working body?
>
> A good, intelligent worker told me of enforced idleness of six weeks which involved him in debt requiring six years to pay off!
>
> Do employers not do all these things and many more? And do they not fail to do many other things which they might do in behalf of their employee body? Is labor not regarded by employers in the light of a commodity like sugar or salt, regardless of hungry mouths to feed, or rent, or other claims at home? A commodity can be laid away on a shelf, or in cold storage, to await a time of better demand.
>
> In what sense, then, can labor be regarded as a commodity. Can labor hibernate in times of light demand and come forth out of cold storage when needed?
>
> Maybe so on Judgment day, but not otherwise.
>
> To be honest with ourselves, what right have we to expect workers to have much consideration for their employers?
>
> Have we set our employees an inspiring example?
>
> Had we given serious thought to the subject we would have easily discovered that the average unemployment of Great Britain and the United States is only 5 per cent. of the whole. The best authority vouches for these figures, namely, Secretary of Labor Wilson, in the New York *World* of June 3, and B. Seebohm Rowntree for Great Britain, covering the ten years preceding the late war.

AMERICA'S OPPORTUNITY

The part played by Scientific Lubrication in the Nation's Agriculture

ONLY one half of America's total farm area is improved and bearing crops. Our average yield of wheat per acre is 14 bushels. By intensive farming Germany grows 28 per acre, England 32.

We can double the area of our cultivated land and quadruple our agricultural production.

How?

The farmer turns to his tractor, his motor-truck and his automobile to hasten larger yield and lessen waste.

His tractor plows a better seed bed. It works in torrid weather which horses cannot stand. It harvests. It does numerous odd jobs. It fills silos, it pumps, it threshes.

His motor truck hastens the farmer's crops to market. Waste is eliminated. The incentive is given to plant for bigger yield.

The farmer's automobile has wiped out the comparative isolation of his life. The neighbor two miles away may now be reached in a few minutes.

* * *

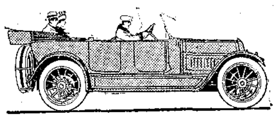
SCIENTIFIC LUBRICATION is playing its part on the farm.

It is significant that great numbers of farmers use nothing but Gargoyle Mobiloils for their automotive equipment. Almost every tractor manufacturer uses only Gargoyle Mobiloils in state and national demonstrations. The farmer's day of larger yield is just ahead. The work must go on.

GARGOYLE

Mobiloils

A grade for each type of motor



Correct Automobile Lubrication

GARGOYLE

Mobiloils

A grade for each type of motor

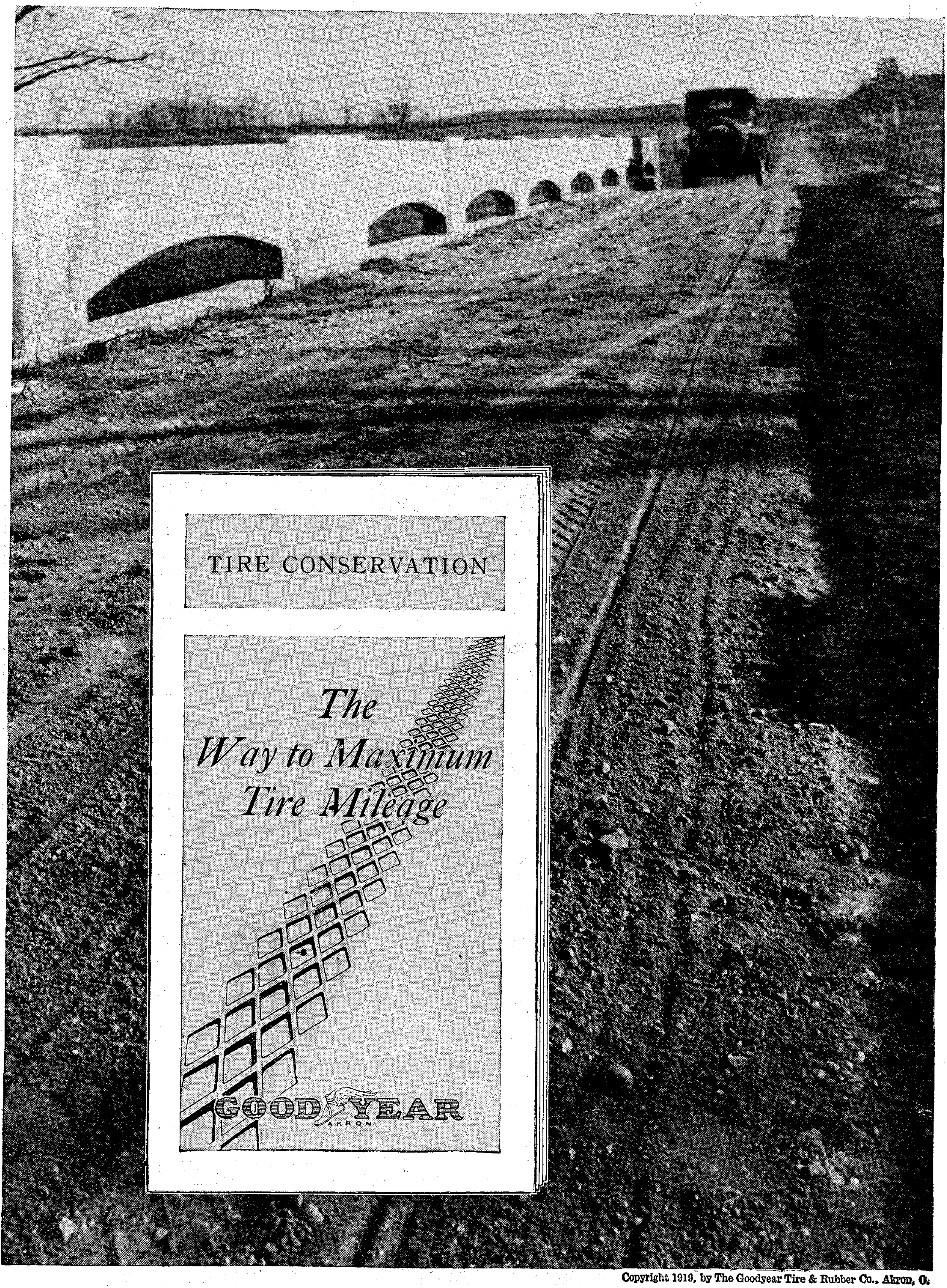
Gargoyle Mobiloils for engine lubrication are:

Gargoyle Mobiloil "A"
Gargoyle Mobiloil "B"
Gargoyle Mobiloil "E"
Gargoyle Mobiloil Arctic

The Chart below indicates the grade recommended by the Vacuum Oil Company's Board of Engineers. The recommendations cover all models of both passenger and commercial vehicles unless otherwise noted. If your car is not listed in this partial Chart, send for booklet "Correct Lubrication" which lists the correct grades for *all* cars.

AUTOMOBILES	1919 Models		1918 Models		1917 Models		1916 Models		1915 Models	
	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter
Allen	A	Arc.	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Auburn (4 cyl.)	....	....	....	....	....	....	A	Arc.	A	Arc.
Auburn (6 cyl.)	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
Auburn (6-38)	....	....	....	....	A	Arc.	A	Arc.	....	....
" (6-39B)(Teetor-H)	....	....	A	Arc.	....	....	....	....	....	....
Autocar (2 cyl.)	A	Arc.	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Briscoe	A	Arc.	A	Arc.	A	Arc.	A	Arc.	A	Arc.
" (8 cyl.)	....	....	....	....	....	....	A	A	....	....
Buick	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
Cadillac (8 cyl.)	A	A	A	A	A	A	A	A	Arc.	Arc.
Case	Arc.	Arc.	Arc.	Arc.	A	Arc.	A	Arc.	A	Arc.
Chalmers	....	....	A	A	....	....	Arc.	Arc.	Arc.	Arc.
" (6-40)	....	....	....	....	....	....	A	Arc.	....	....
" (6-30)	A	A	....	....	A	A	A	A	....	....
Chandler Six	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
Chevrolet	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
" (8 cyl.)	A	A	A	A	A	A	....	....	....	....
" (F.A.)	A	Arc.	A	Arc.	....	....	....	....	....	....
Cole	....	....	....	....	....	....	Arc.	Arc.	Arc.	Arc.
" (8 cyl.)	A	A	A	A	A	A	A	A	A	A
Cunningham	....	....	....	....	....	....	....	....	Arc.	Arc.
" (8 cyl.)	A	A	A	A	A	A	A	A	....	....
Dart	Arc.	Arc.	A	Arc.	A	Arc.	A	Arc.	Arc.	Arc.
" (Model C)	....	....	....	....	A	Arc.	A	Arc.	A	Arc.
" (2 and 3½ ton)	A	A	A	A	....	....	....	....	....	....
Dodge Brothers	A	Arc.	A	Arc.	A	Arc.	A	Arc.	E	E
Dort	A	Arc.	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Federal	Arc.	Arc.	A	A	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
" (Mod. S-X)	....	....	A	A	A	A	....	....	....	....
Federal (special)	....	....	Arc.	Arc.	....	....	....	....	....	....
Fiat	....	....	B	A	B	A	B	A	B	A
Ford	E	E	E	E	E	E	E	E	E	E
Franklin	A	A	A	A	A	A	A	A	A	A
Grant	A	Arc.	A	Arc.	A	Arc.	A	Arc.	Arc.	Arc.
" Com'l.	Arc.	Arc.	....	....	....	....	....	....	....	....
" " (Model 12)	A	Arc.	....	....	....	....	....	....	....	....
Haynes	A	Arc.	A	Arc.	A	Arc.	A	Arc.	A	Arc.
" (12 cyl.)	A	A	A	A	A	A	A	A	....	....
Hudson	....	....	....	....	....	....	Arc.	Arc.	Arc.	Arc.
" Super Six	A	Arc.	A	Arc.	A	Arc.	A	A	....	....
Hupmobile	A	Arc.	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Kelly Springfield	A	A	A	A	A	A	A	A	A	A
King	....	....	....	....	....	....	....	....	A	Arc.
" (8 cyl.)	A	A	A	A	A	A	A	A	Arc.	Arc.
" Commercial	....	....	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
Kissel Kar	A	Arc.	A	Arc.	A	Arc.	A	Arc.	A	Arc.
" " (Model 48)	....	....	....	....	....	....	A	A	A	A
" " (12 cyl.)	....	....	A	A	A	A	....	....	....	....
Lexington	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
Lippard Stewart	....	....	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
" " (Mod. M)	....	....	....	....	A	Arc.	A	Arc.	....	....
" " (Mod. MW)	....	....	....	....	A	Arc.	....	....	....	....
Locomobile	A	E	A	E	E	E	E	E	E	E
McFarlan	....	....	A	Arc.	A	Arc.	A	A	A	Arc.
Madison	....	....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
" (8 cyl.)	....	....	....	....	A	A	A	A	....	....
Marmon	A	A	A	A	A	A	A	A	A	Arc.
Maxwell	*Arc.*	*Arc.*	*Arc.*	*Arc.*	*Arc.*	*Arc.*	*Arc.*	*Arc.*	*Arc.*	*Arc.*
Mercer	A	A	A	A	A	A	A	A	A	Arc.
" (22-70)	....	....	....	....	....	....	....	....	Arc.	Arc.
Mitchell	A	Arc.	A	Arc.	A	Arc.	A	Arc.	A	Arc.
" (8 cyl.)	....	....	....	....	....	....	A	A	....	....
Moline-Knight	B	A	B	A	A	A	A	A	A	A
Monroe	....	....	A	Arc.	A	Arc.	E	E	A	Arc.
" (Mod. M4)	....	....	A	A	A	A	....	....	....	....
" *(Mod. S)*	A	A	....	....	....	....	....	....	....	....
Moon	....	....	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
Nash	A	Arc.	A	Arc.	....	....	....	....	....	....
" (Mod. 671)	....	....	A	A	....	....	....	....	....	....
" (Quad)	A	A	A	A	....	....	....	....	....	....
National	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	A	Arc.	A	Arc.
" (12 cyl.)	A	A	A	A	A	A	A	A	....	....
Nelson	A	A	A	A	A	A	....	....	....	....
Oakland	A	A	A	A	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
" (8 cyl.)	....	....	....	....	....	....	A	A	....	....
Oldsmobile (4 cyl.)	A	Arc.	....	....	....	....	Arc.	Arc.	Arc.	Arc.
" (6 cyl.)	A	A	A	A	Arc.	Arc.	....	....	Arc.	Arc.
" (8 cyl.)	A	A	A	A	A	A	A	A	....	....
Overland	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
Packard	....	....	....	....	....	....	....	....	A	Arc.
" (12 cyl.)	A	A	A	A	A	A	A	A	....	....
" Commercial	A	A	A	A	A	A	A	A	A	A
Paige (4 cyl.)	....	....	....	....	....	....	....	....	A	Arc.
" (6 cyl.)	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
" (6-36)	....	....	....	....	....	....	A	Arc.	A	Arc.
" (6-38-39)	....	....	....	....	A	Arc.	....	....	....	....
" (6-40)	A	Arc.	A	Arc.	....	....	....	....	....	....
Paige (Com'l)	Arc.	Arc.	Arc.	Arc.	....	....	....	....	....	....
Paterson	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
Peerless	....	....	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
" (8 cyl.)	A	A	A	A	A	A	A	A	....	....
Pierce Arrow	A	A	A	A	A	A	A	A	Arc.	Arc.
" " Com'l.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
Premier	A	A	A	A	A	A	A	Arc.	A	Arc.
Regal	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
" (8 cyl.)	....	....	....	....	....	....	A	A	Arc.	Arc.
Renault (French)	....	....	....	....	....	....	A	Arc.	A	Arc.
Reo	A	Arc.	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Riker	A	E	A	E	E	E	....	....	....	....
Saxon	E	E	E	E	E	E	E	E	E	E
Selden	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
" (¾ ton)	....	....	....	....	A	Arc.	....	....	....	....
Simplex Crane	....	....	A	A	A	A	A	A	Arc.	Arc.
Stearns-Knight	B	A	B	A	A	A	B	A	B	A
Studebaker	A	Arc.	A	Arc.	A	Arc.	A	Arc.	Arc.	Arc.
Stutz	A	A	A	A	A	A	A	A	A	A
Velie (4 cyl.)	....	....	....	....	....	....	....	....	A	Arc.
" (6 cyl.)	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
" (2 & 3½ ton)	Arc.	Arc.	Arc.	Arc.	....	....	....	....	....	....
" (¾ ton)	A	Arc.	A	Arc.	....	....	....	....	....	....
Westcott	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
White	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
" (Sixteen Valve)	A	A	A	A	A	A	....	....	....	....
White (3 ton)	A	A	Arc.	Arc.	....	....	....	....	....	....
Willys-Knight	B	A	B	A	A	A	B	A	B	A
Willys Six	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	....	....	....	....
Winton	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.

VACUUM OIL COMPANY *Specialists in the manufacture of high-grade lubricants for every class of machinery. Obtainable everywhere in the world.* **NEW YORK, U.S.A.**


TIRE CONSERVATION
The Way to Maximum Tire Mileage
GOODYEAR
AKRON

Copyright 1919, by The Goodyear Tire & Rubber Co., Akron, O.

GOODYEAR

The Way to Maximum Tire Mileage

In Boston, the Creed-Kellogg Company attribute their low tire-mile costs to the toughness of their Goodyear Tires, plus the willing expert service of a Goodyear Service Station Dealer. Mr. Howard, of this Company, says that the systematic inspection for tread cuts, under-inflation, misalignment, and so on, "has been of great benefit to us in securing more mileage." Go regularly to the nearest Goodyear Service Station Dealer and ask for this sort of mile-saving Goodyear service

THE largest single group of tire users in the world agree that the first step on the way to maximum tire mileage is a set of Goodyear Tires.

A large proportion of these users also realize that even Goodyear Tires will more surely deliver greater mileage when they are cared for and given timely service.

Our agreement with this is seen in Goodyear's sincere attempt, through the medium of its Service Stations and its Tire Savers, to further tire saving in every possible way.

In furtherance of this plan we list below the commonest of tire and tube injuries and the ways that you can use to correct them, to get maximum Goodyear tire mileage.

◊ ◊ ◊

TRUING UP WHEELS. Bumping into curbs and similar strains are likely to cause *misalignment* of front wheels, which wears down the rubber tread rapidly.

Ask your Goodyear Service Station Dealer to test your wheels for alignment.

◊ ◊ ◊

TREAD CUTS. Scraps of metal, glass, switch points, will cut even Goodyear treads when squarely struck.

When tread cuts first appear, fill them with Goodyear Tire Putty and Cement; prevent the small cuts from becoming large.

◊ ◊ ◊

UNDER-INFLATION. This probably ruins more tires than any other one thing.

Test your tire pressure with your inflation gauge regularly, and keep the pressure up.

◊ ◊ ◊

FABRIC BREAKS. Hitting bumps while running at high speed, may cause *fabric breaks.* These grow in size; the tube is pinched, and a blowout results.

Use a Goodyear Inside Protection Patch over a fabric break before it has an opportunity to grow. See your Goodyear Dealer about a vulcanized repair.

◊ ◊ ◊

CARE OF TUBES. Keep the wheel rim free from rust; keep the inside of casing clean; use enough, not too much, talc; keep the valves clean and tight; keep the air pressure up. Carry spare tubes in Goodyear tube bags; don't allow them to be injured by tools.

It is easy to repair tube injuries with a Goodyear Tube Repair Kit or Goodyear Self-Cure Patches. Keep a Kit or a small box of Patches in your car.

◊ ◊ ◊

OTHER INJURIES. Chains improperly applied, or kept on after the necessity has passed, cause tire injuries. Driving in car tracks grinds off the side of the tread, and may break the side wall fabric. Unequally adjusted brakes cause rear tires to be worn in spots. When the rubber tread is soaked in oil it soon rots.

It is practically impossible to repair these injuries at home. See your Goodyear Service Station Dealer; ask his advice about a vulcanized repair.

◊ ◊ ◊

Use Goodyear Tires and Tubes. Keep Goodyear Tire Savers in your car. Get them at the nearest Goodyear Service Station Dealer. Ask him for the Goodyear Lessons on tire care. Go regularly for helpful advice and tire inspections. This is the way to maximum tire mileage.

TIRE SAVERS

> In our own plants we have adjusted ourselves to 107 per cent. increase in the pay-roll during the war. How trifling then to talk of the cost of a 5 per cent. tax on the pay-roll to provide an insurance fund against unemployment?
>
> It is estimated that a 4½ per cent. tax on the pay-roll of industry would provide an insurance fund of half-pay for unemployment from all legitimate causes, and an old-age insurance fund.

Industry has done more in the last fifty years to benefit the human race than all social effort in previous history of all time, but the greatest accomplishment to its credit, declares Mr. Caldwell, is that it has stirred in men their latent cultural wants, of the possession of which they were dumbly conscious. He continues in the same enlightening vein:

> The awakening of this consciousness arouses ambition for its gratification and creates a new leaven to stimulate all human efforts.
>
> The North-American Indian did not have these qualities, so he was spared these problems.
>
> Shall we not, tho, accept the problem of progress as part—not of the white man's burden, but as part of the white man's joyous task?
>
> The wonderful record of the effort of industry administering to human wants has been the fruit of the efforts of but an infinitely small number of members of society who have been directors of industry's activities.
>
> Now the problem has grown too large. Human desires are multiplying like the proverbial grain of mustard-seed, and a larger force of trained industrial administrators must be brought into being to meet the task.
>
> Great as is the record accomplished by the present leaders of industry, it is puny compared to what the future requires. We must reorganize our industrial army to meet this call, as we did our military army in the war.
>
> One hundred and forty years ago our forefathers founded this nation on the principle that the people should be governed by the consent of the governed. That was a radical departure in government for those days. Kings stood aghast, and the record of the times indicates that the fathers of our country were worried enough themselves at their novel undertaking. We have now practised democracy politically with success sufficient to induce the whole world practically to adopt it, and there are no kings left to worry about.
>
> We do not any longer enjoy a monopoly of political democracy. So if we are going to maintain our democratic leadership in the world, we shall have to extend its scope.
>
> We must democratize industry now, and that is where councils have their value. They are the forums for the expression of the spirit of the time, which shall constitute our literature of the present century.
>
> We see in a comparison with Russia and China what political education has done for our people's prosperity. It is not what it ought to be, but it is better than these others, and it is going to be still better.
>
> Even Greece, under Venizelos, only exports five dollars per annum per capita, against Canada's $125.
>
> We thus perceive that a prosperous country is impossible without a prosperous people. Our people have become intelligent, progressive, and prosperous through enlightened government. Is it not probable that democracy, applied to industry through councils, shop committees, or Whitley systems, will develop men industrially as men have been developed by political democracy, through political councils?
>
> The body of workers is a vast field of undeveloped talent, the use of which industry is being denied.
>
> Have not most of our leaders risen from the ranks? They had the force and personality to overcome opposition and difficulties. Where one succeeded one hundred failed. With half a chance more would succeed.
>
> The proof of that is that more have succeeded here in America, where opportunity was present, than in China, Russia, Armenia, or elsewhere, where they had no chance. The more who succeed, the more progress we make as a people. We can always stand more success with reasonable resignation.
>
> Whitley councils in Great Britain have had much success, and are now applied to over one-third of the British workers. In the Lancashire cotton district of England this principle of councils for conferences between workers and management has been amicably adjusting an average of seven hundred disputes per year. In some industries increased production of 100 to 200 per cent. has been attained as a result of these councils, of harmonious relations, and a square deal.
>
> The new republic of Germany, be it noted, has incorporated employees' councils as a feature of their new order.
>
> The only way to increase wealth so as to provide a greater reward to labor is to increase production so as to have greater wealth to divide. That can only be obtained by cooperation. The individuality of the individual worker is not to be longer suppresst.
>
> It was never suppresst with profit to either. The sentiment of self-determination has asserted itself, not only with nations but with individuals and needs to be taken into account.
>
> Until this new force learns to know its own strength, it is natural to abuse its power, contrary to its own interests. Labor will learn that in reducing production through strikes it is depriving the public—of which it itself composes over 90 per cent.—of the necessities of life, and by diminishing the supply automatically raises the price on itself.
>
> When labor learns that the cost of strikes is paid for by labor, and the consequence of strikes—be it inconvenience or loss in any form—is visited back upon labor to the extent of nine-tenths of their effect, they will begin to seek for some other means to accomplish their just wishes. They will find this in joint councils with employers.
>
> Disputes between labor and capital can be permanently adjusted no more by labor controlling capital than by capital controlling labor. Neither can successfully control the other.
>
> Democracy in industry consists in their jointly governing each other by the consent of each.
>
> We have seen the failure of monarchies—government by aristocracies. We see the failure of government by the proletariat in Russia, which must necessarily disappear, as it is merely the application to the opposite extreme of society, of an already discredited type of government of absolutism.

RECKLESS BUYING MAKES HIGH PRICES HIGHER

PRICES continue to advance, and everybody continues to pay them. Of course there are some protests, but it is a disturbing fact that a great part of the population is meeting advancing costs carelessly, almost cheerfully. In fact, "price no object" has become the motto of such a considerable portion of the American purchasing public that our economic authorities are becoming alarmed. The Federal Reserve Bank of the New York district in its recent report on November prices declares: "To high prices the buying public shows almost no resistance; buyers are completely indifferent or they accept the higher prices as quite to be expected. . . . The reckless buying that is indicated from many sources acts directly to postpone the return to lower prices." Newly acquired riches are being dissipated in luxuries, we are told. "Profiteers" thus not only mulct the public in the first place, but by the reckless expenditure of their ill-gotten gains make prices still higher for the already shorn common citizen. During the month of November prices of the majority of the articles that enter into the cost of living advanced materially. The increase on November 3 of the rediscount-rate did not affect the outcome, according to the Bank's report on business conditions for the month.

This commentary is carried in a special dispatch to the New York *World* from Atlantic City, under date of December 3:

> "We are living in a dangerous dream to-day, with the ever-mounting costs," was a warning given to the Associated Dress Industries Association of America, in annual session at the Breakers Hotel, by Harry J. Tregge, secretary-treasurer of the National Association of Credit Men.
>
> "We must prepare for the reaction, as the peak has been reached," he added. "The wage-earner must be cautioned against his wasteful investments, his extravagance, or the time will come when he will regret his recklessness. Speculation must be curbed; gambling in all forms, especially stocks, is an American fault, if not a disease.
>
> "You dress-material men have found no difficulty recently in selling merchandise, no matter what the price. This is unhealthy, dangerous. This can not go on indefinitely; brakes must be applied."
>
> Mr. Tregge cautioned the wholesalers to advise customers not to overbuy. Conservatism is necessary to protect the credit system of the country, he said.

Taking up price conditions in some detail, the New York *Times* quotes the Federal Bank's report as follows:

> It had been expected that the increase in the rediscount-rate, which was the first step taken by the bank toward deflation, would be reflected in the commodity-price trend, but this failed to develop. Discussing retail trade in November, the bank's report, which was issued last night, says:
>
> "The repressive effect of the war on personal expenditure, which began to lift at the time the armistice was signed, disappeared completely with most people

Ready for the Body; Not an Extra to Buy

Gramm-Bernstein savings begin even before the truck is put to work. They actually begin with the very purchase of the chassis.

For it is sold completely equipped and ready for the body.

There is literally not an extra to buy.

Gramm-Bernstein Trucks carry, as standard equipment, $500 to $550 worth of accessories, according to type and size.

This equipment is all essential to truck operation. Any truck must have it.

Ordinarily, it is paid for, over and above the chassis price.

Nothing of the sort with Gramm-Bernstein. It is complete and ready for the body needed in the work it is to do.

In this, as in the industry itself, and in most of its forward steps, B. A. Gramm has led the way.

Gramm-Bernstein Trucks today have behind them something even greater than almost 20 years of truck building and inventive experience.

They have an honorable record of performance and economy—of high duty and low cost.

They are so firmly entrenched that Gramm-Bernstein owners invariably add a Gramm-Bernstein when they need another truck.

Gramm-Bernstein reliability, willingness to work, and extraordinary long life, are almost proverbial among business men who have experienced them.

Any comparison of work done, on a cost-mile basis of operation and maintenance, will demonstrate the greater economy of Gramm-Bernstein.

Any comparison of truck experience, truck units and truck equipment will demonstrate the greater value of Gramm-Bernstein.

Any Gramm-Bernstein dealer will be glad to advise with you.

All Gramm-Bernstein Transmissions are provided with a pad for attaching Gramm's Basic Patent Power Take-off. Dealers and truck owners should assure themselves that any trucks purchased with power take-off do not infringe B. A. Gramm's Basic Patent No. 1194994.

The Gramm-Bernstein Motor Truck Co., Lima, Ohio

Pioneers Since 1901—Builders of the First Liberty (U. S. A.) Truck

New York National Truck Show: Jan. 3 to 10. Section P, Space 6, 7, 8—8th Coast Artillery Armory
Chicago National Truck Show: Jan. 24 to 31. Section C-4, South Wing—International Amphitheatre

"Extras" are Standard on G-B Worm Drive Chasses

Standard Gramm-Bernstein cab, with doors and storm curtains.

Exceptionally rugged metal ventilating windshield.

Front fenders and steps.

Sturdy radiator guard, attached to frame independent of radiator.

Radiator shutter, operated from seat—facilitates starting, saves gasoline.

Boyce motometer, to indicate temperature of engine.

Army truck type towing hooks at front end. Spring trailer drawbar at rear, on larger types.

Electric generator. Side lights with dimmers and non-glare lenses; dash light; bullseye tail light, protected in frame; electric horn.

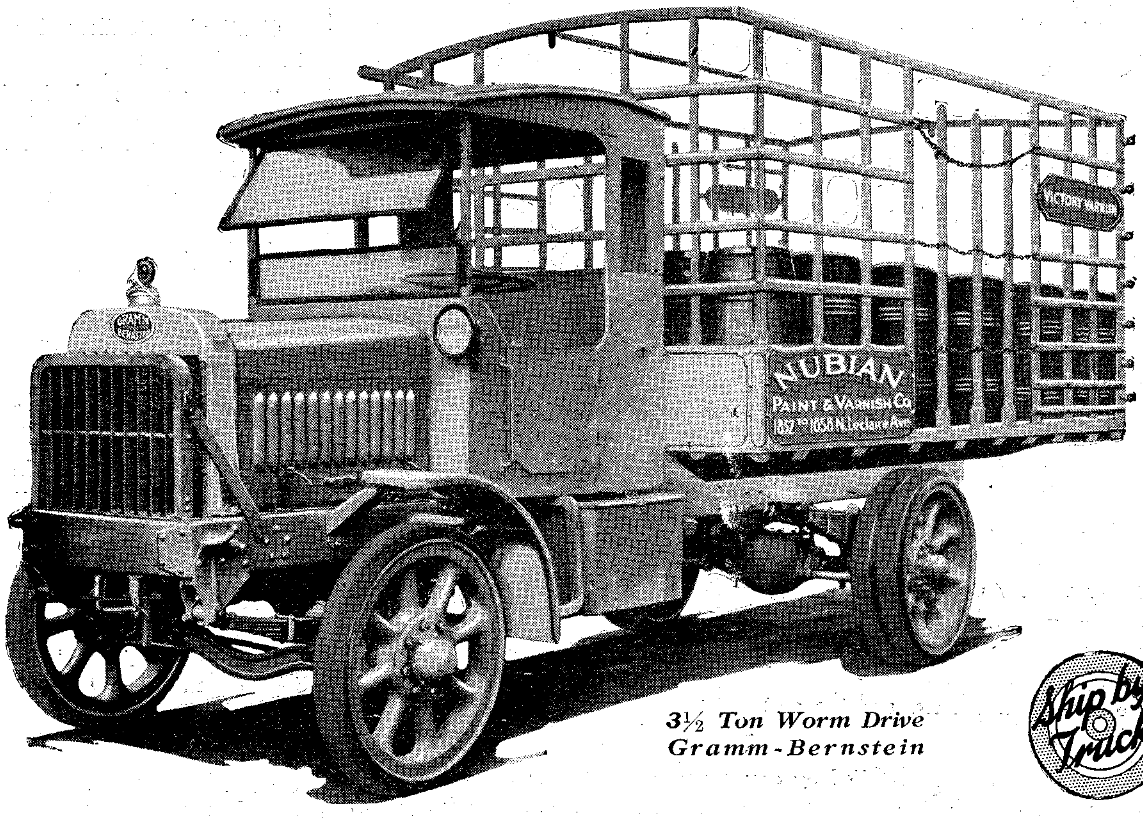
Patented Gramm-Bernstein always-in-mesh transmission, with outside filler spout.

Patented wick oilers on all spring bolts.

Metal license brackets, front and rear.

100,000-mile hub odometer.

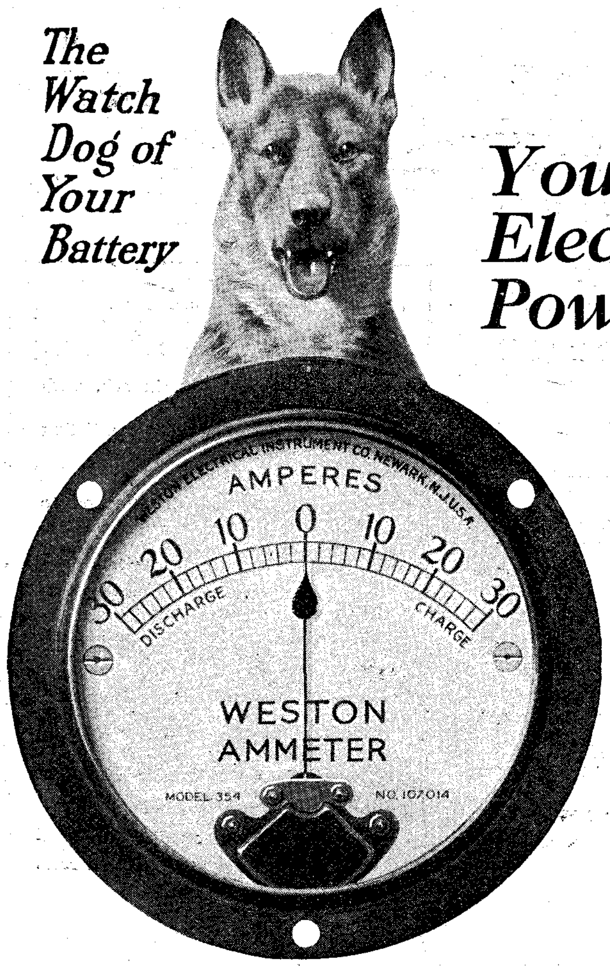
GRAMM PIONEER BERNSTEIN



3½ Ton Worm Drive Gramm-Bernstein

Ship by Truck

GRAMM-BERNSTEIN



The Watch Dog of Your Battery

Your Car's Electrical Power Plant

The electrical system of your car is like any other electrical power plant. It cannot be expected to properly operate without supervision.

Correctly Indicates Electrical Performance

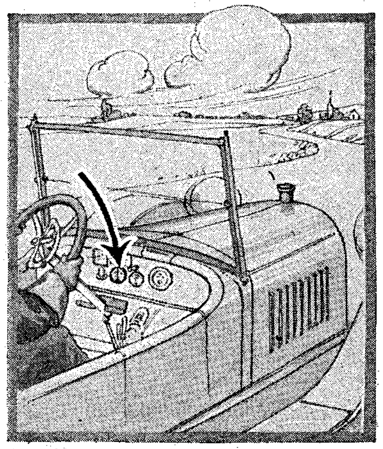
WESTON AMMETER

For Dependable Service Outlasting Your Car

The Weston Ammeter dependably guides you in the intelligent operation of the electrical functioning—warns you when the input of current to your battery is not sufficient and when the outflow is too great. It is the Ammeter **with a pedigree**—the product of 30 years specialized experience in the manufacture of electrical indicating instruments for every variety of need.

Wherever you may travel in any part of the World—you will find Weston Instruments looked upon as absolutely supreme in their line.

It will pay you to install a Weston, and the cost will be surprisingly small.



Sold by Accessory Dealers or installed by any Garage or Battery Service Station. Send for descriptive leaflet showing special types and finishes, giving model of your car.

We shall exhibit at the Automobile Show, Grand Central Palace,
New York City, January 3 to 10. Come and see us.

WESTON ELECTRICAL INSTRUMENT CO.
NEWARK NEW JERSEY
Branch Offices in all Principal Cities

upon the sale of the Victory Loan. Carefully compiled reports from several branches of retail trade, made particularly with a view to determine the extent of luxury buying, indicate that never has there been so much spending, such a demand for expensive articles, and such disregard of prices. It is natural that New York City should be a primary market for luxury-buying because people from all parts of the country go to its stores to spend their surplus funds; but reports from many sections of this district (which includes part of New Jersey and Connecticut) indicate that free spending is general and that the conclusions reached for New York apply elsewhere, in small and large cities alike."

The foregoing would indicate that the increasing of the rediscount-rate by the Federal Reserve Bank has not as yet found reflection in a decrease in the cost of living. In this connection the bank's explanation of why the rate was increased is interesting. It reads:

"The increase in rates, tho only fractional, was the first step taken by the Federal Reserve Bank toward assuming its normal relation to the volume of credit. During the war and as long as the Government continued to borrow on an increasing scale, a constantly increasing expansion of credit was necessary and the Federal Reserve Bank had not only to provide the basis for such expansion but to encourage it, and its rate policy was necessarily subordinated to the rates carried by the Government bonds and certificates. But when the tide turned and the Government's borrowing began to decrease, credit contraction became not only possible but necessary, and it was the duty of the Federal Reserve Bank, hitherto the agency of expansion to take the lead in encouraging the gradual contraction of credit."

Continuing its discussion of retail trade, the report says:

"Inquiry was made in six branches of retail trade, namely, jewelry, furs, musical instruments, furniture, automobiles, and clothing, and extended to department stores dealing in two or more of these specialties. Altogether somewhat more than forty stores and individual authorities were visited. Percentages showing the increase above a year ago in the volume of total sales, averaged from estimates made, were as follows:

	P. C. Inc. in Sales Val.	P. C. Inc. in Units.
Jewelry	48	44
Furs	57	48
Musical instruments	70	*
Furniture	78	38
Clothing	141	53

* Indeterminate.

"Figures were not obtainable from passenger-automobile dealers because of the current shortage in cars due to the somewhat slower readjustment from war-production.

"It appears from the inquiry that the increase in the value of sales is greater than the number of units sold. This difference is mainly a reflection of the increase in prices charged. Jewelers account for the fact that the total value of sales has increased only slightly more than the volume of units sold on the ground chiefly that gold is the basic material of jewelry, and that gold, because of its fixt price, has not increased in dollar value. Furriers, in telling why price-increases in certain furs have not produced a greater difference, say that the introduction of many furs not known before in this market has tended to equalize the average of prices.

"To high prices the buying public shows almost no resistance; buyers are either completely indifferent or they accept the higher prices as quite to be expected. Many of these new buyers are unaccustomed to former prices and accept the new scale therefore without question, often paying in cash.

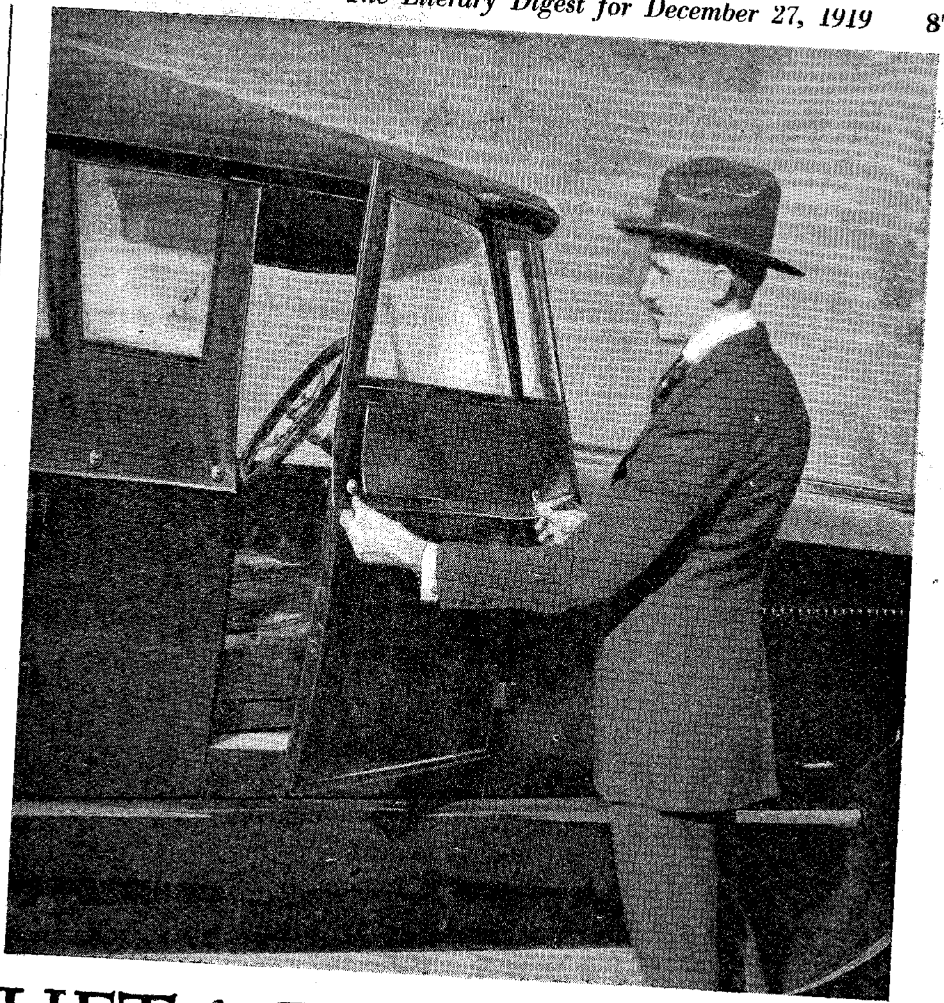
"Reports from the stores indicate that the wave of buying done by wage-earners has somewhat subsided, a result, it was suggested, of strikes or unemployment caused by strikes. People who have possest wealth for some time also have been disposed to limit their purchases, relying on present supplies to carry them through in the hope that prices may come down. The consensus of opinion among the retailers is that the bulk of the buying comes from the intermediate classes, and mainly from those whose wages or income has risen far above the amount required to maintain their former standard of living.

"The reckless buying that is indicated from many sources acts directly to postpone the return to lower prices, to produce overexpansion in the country's industries, and to hamper the capacity of this country not only to maintain its financial position in the world, but to serve those parts of the world which are still suffering grievously from the losses of war. With this point of view the wisest retailers are fully in accord."

HOW GERMANY JUST ESCAPED ANNIHILATION

MARSHAL FOCH, it has frequently been reported, was somewhat disappointed by the sudden and unexpected end of the war; the same thing may be said with equal justice of the men who were in charge of the preparations for the great American drive which was to take place in March, 1919. If, like Foch, they welcomed the end of the slaughter, they could not help regretting that the full force of their preparations was not to be exerted upon Germany. One of the stories that came out soon after the close of the war was that of the achievement of the War Department in making deadly gases. There was so much that was out of the ordinary about this report that some skepticism was exprest, but E. A. Powell, in his book, "The Army Behind the Army," assures us that there was no exaggeration and that the real accomplishment was even beyond the earlier reports. As the Ogden *Standard* summarizes and comments on this account:

> We all have heard of the gas that was to have ended the war. Mr. Powell says it was manufactured at Willoughby, near Cleveland, and was seventy-two times more deadly than the mustard-gas of the Germans. It is estimated that ten tons of this death-dealing poison could have destroyed all life in New York City.
>
> American Army officers had planned to make their big offensive in March, 1919, if the war was not ended before the winter of 1918-19 caused operations to slow down, and one of the weapons to have been employed was three thousand tons of this gas, ten pounds to a shell, and 350 pounds to a drum to be dropt from airplanes.
>
> Powell in his book presents a number of extraordinary performances by those who



LIFT the DOT Fasteners

TRADE MARK

CURTAINS that open with the doors are held flat and secure with Lift-the-Dot Fasteners. The front door curtain is carried around in front of the windshield frame and fastened there also with Lift-the-Dots.

This is the month when your car should be fitted with new curtains and top, before Winter rains and snow come. Be sure to specify the use of Lift-the-Dot Fasteners throughout.

The Lift-the-Dot is a self-locking fastener. When closed—the socket snapped on the post—it is securely locked on three sides and cannot be unfastened by accident or force of wind, yet it is opened quickly and easily by lifting on the fourth side—the side with the dot.

Because of its beauty, compactness and sturdy construction, the Lift-the-Dot Fastener is more and more generally used on luggage, sporting goods, heavy clothing and many other articles of canvas and leather.

Manufacturers of goods requiring fasteners should know the entire Dot Line of Fasteners, of which Lift-the-Dot is but one type.

A descriptive catalogue will be mailed on request.

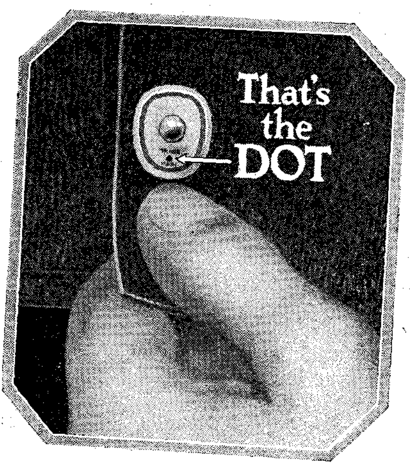
The DOT Line of Fasteners

TRADE MARK

●

TRADE MARK
REG. U. S. PAT. OFF.

The "Lift-the-Dot" Fastener
The "Durable Dot" Fastener
The "Veltex Dot" Fastener
The "Anzo Dot" Fastener
The "Segma Dot" Fastener
The Common Sense Fastener



CARR FASTENER COMPANY, Boston, Mass.

"Mutual Benefit" at Hydraulic

WHAT IT REALLY MEANS

In a recent article in this series there appear these words:

> "Much misunderstanding (at Hydraulic) is avoided as to motive. Everybody at Hydraulic knows what is proposed almost as soon as it is under way, and long before a positive decision has been reached. Everybody's mind goes to work, and suggestions come from all directions. We make every endeavor to see that no man lacks information or opportunity for expression. Every man knows his suggestions will be received with respect, and carefully considered."

These sweeping statements mean nothing, or they mean everything.

They mean nothing if not substantiated by examples in actual practice.

To Hydraulic they mean everything because they mean a *spirit* among Hydraulic workers, managers and owners—a spirit so real, so much a tangible thing, that when an actual accomplishment takes place every statement contained in these quoted words finds itself justified.

This article presents an example of results. It deals with the Hydraulic Mutual Benefit Association—not with the details of organization, nor with the details of benefits. It is quite likely that others have worked out details in similar plans better than we have worked them out; that is largely a matter of evolution and we hope to help and be helped in this regard as time goes on.

But the question which constitutes the acid test of Hydraulic spirit—of the character of the Hydraulic Mutual Benefit Association, as we see it, is not a question concerning some detail—*but this question:*

Is it *of the men*, *by the men*, *for the men?*

Is it *of the men?* Let us see.

THE conception of a Mutual Benefit Association embracing all the Hydraulic plants was presented to the Workmen's Representative Committee and the then existing Aid Societies and an expression of opinion asked. Only the broadest outlines of the idea could then be discussed. A willingness to support such a venture meant not a pledge to a tangible, definite thing; it could mean but one thing, *an expression of confidence* on the part of the men that *no ulterior motive lay behind the suggestion*—of confidence, that they would have a voice in the framing of the association and in the actual operation, and that the final result would be to their benefit.

Ninety-five per cent of Hydraulic employes at all plants made application at the outset for membership, thereby giving unqualified approval of the suggestion.

These men, having applied for membership, then proceeded to elect from their own ranks, Directors, with the understanding that the Directors would draw up the constitution and by-laws that should govern the association.

These Directors, half of them elected from among the foremen and other representatives of management, and half of them elected from among the workmen of each plant, then proceeded to gather suggestions from among the men, studying on the one hand the workman's financial ability to support such an association and on the other hand, the workman's vital needs in his family circle—the circle for whose benefit the association came into being. Having done this, and utilizing their best judgment and the best of the suggestions, the Directors formulated the constitution.

Was it *of the men?* It was the voice of *ninety-five* per cent of them *from the outset.*

Was it *by the men?* Every director is a director only by virtue of the confidence that put him in office through popular vote. Every officer is an officer only by virtue of the popular vote of the directors themselves—the men's spokesmen.

Is it *for the men?*

Today the constitution, a thing to which support was yesterday pledged on faith (complete or incomplete as some expert might view it) is at least one thing, viz., a fabric through which every thread of power is a thread that conserves the worker's interests and the interests of those closer to him than life itself.

WHAT DOES IT DO FOR THEM?

It provides sick benefits, accident benefits, life insurance on the members and, in lesser degree, on their wives and children. It has power to loan money to members for building and improving homes, etc. These, and other advantages, are provided, as a natural course.

WHERE DOES THE MONEY COME FROM?

From the men and from the company—the men pay a dollar a month—the company duplicates every dollar so paid.

WHO ADMINISTERS THE MONEY?

The men's representatives (the General Board of Directors) who direct all payments—all investments of surplus funds—and from whose final decisions there is no appeal.

DOES this spell a spirit of *mutual* confidence, of *mutual* respect, on the part of the company and on the part of the workers?

Can anyone say that an institution conceived in this spirit and brought into being in this manner is a good business proposition and nothing more?

Does a development so plainly *for the men*, as it is also *of the men* and *by the men*, point out nothing more than material advancement?

The Mutual Benefit Association now under way at Hydraulic marks material development desirable from every standpoint, but in the Hydraulic "family" it is recognized first, not for what it does but for what it *is*—a visible evidence of a *spirit* at Hydraulic, of mutual trust, of trust which begets more trust in more things, which shall open up possible avenues of still greater team-work between those who invest their capital and those who invest their labor—which means dividends in a confidence for the future, in contentment, and in money, to every one who has come to know Hydraulic as "more than a place to work."

This is the eleventh of a series of articles in this publication. Reprints of former articles will be sent free on request.

THE HYDRAULIC PRESSED STEEL COMPANY
of Cleveland

HYDRAULIC
PRESSED STEEL COMPANY

were preparing America for the great offensive as follows:

So successfully was the gas problem met that by October, 1918, the Edgewood arsenal alone was producing nearly twice as much gas per day as Germany, France, and England together. Typical of Colonel Walker's methods was the immediate scrapping of the slow and dangerous water-cooling method of producing phosgene used in Europe and the invention of a system that turned out forty tons of this gas a day. He thereby cut the cost of this gas to the Government from $1.50 a pound to ten cents a pound. The systems devised for filling, painting, and marking shells were marvels of mechanical ingenuity.

One of the most remarkable discoveries of the war, due to the experiments of General Squier, chief of the Signal Corps, was that trees can be used as instruments in their receipt and transmission of electrical messages, both telegraph and telephone, both by wire and wireless. "From the moment an acorn is planted in fertile soil," to quote the words of General Squier himself, "it becomes a 'detector' and a 'receiver' of electromagnetic waves, and the marvelous properties of this receiver, through agencies at present entirely unknown to us, are such as to vitalize the acorn and to produce in time the giant oak. In the power of multiplying plant-cells it may, indeed, be called an incomparable 'amplifier.'"

When the war ended orders had actually been placed by the United States Government for 23,390 tanks, representing an outlay of approximately $175,000,000. This vast fleet of tanks was to be manned by some 58,000 men—as many as there were in the entire American Army prior to the war with Spain. Had these tanks been placed side by side they would have formed a moving wall of steel forty miles long.

Special motor-trucks, equipped with pumping, filtering, sterilizing, and testing apparatus, time after time demonstrated that they were able to get into action and deliver pure water from a polluted supply within thirty minutes after their arrival. Sixty miles of pipe and three hundred gas-driven pumps were used during the St. Mihiel and Argonne-Meuse operations alone.

An interesting and little known feature of the remarkable work of the chemical warfare service was the elaborate series of experiments on living specimens. It was necessary, on one occasion to send an officer to Mexico to purchase 1,500 Angora goats, experiments having shown that the goat possesses powers of resistance to gas which more nearly approximate those of a human than does any other common animal.

Thanks to the work of Bradley Dewey, of the American Can Company, chief of the gas-defense division, and those associated with him, the A. E. F. wore gasmasks that gave twenty times the protection afforded by those worn by the Germans.

The United States Government now possesses a system of code-transmission which can defy all the experts of the world. This device, developed in 1918 to meet war-needs, is so perfect that a message sent by its means is absolutely indecipherable to the inventor himself; it is the only cipher in existence that is absolutely indecipherable and at the same time practicable.

No single person contributed more to the fine art of perfecting devices for killing Germans at long range during the war than a certain college professor of astronomy. So well did he—Prof. Forest Ray Moulton, of the University of Chicago—adapt his theoretical knowledge of the mathematics of the paths of celestial bodies to the problems of artillery ballistics that he became a major in the engineering division of ordnance. Here is a sample of his achievements: As the result of a series of abstruse calculations he made a change in the shape of the copper driving-band on the six-inch shell, whereby, without adding to the powder charge and with no modification whatever in the gun, he increased its range two and a half miles. What is even more remarkable and important, he so reduced the variation between successive shots that a given number of shells will fall into one-eighth the area formerly covered by their dispersion.

During the Meuse-Argonne offensive our aviators took 100,000 photographs in four days. To meet the demand for maps, plenty of them and at short notice, the engineers erected and operated in France a larger map-producing plant than was possest by France herself or any of the Allies. In order to provide a more rapid means of obtaining topographical information, Maj. James W. Bagley, of the Engineers, invented an aerial cartograph or mapping camera which takes three pictures at a time from an airplane, mapping a strip of territory three and a half miles wide at five thousand feet elevation.

When the armistice was signed, sixty thousand members of the A. E. F. were engaged on railroad-work of various kinds in France; more than a thousand miles of standard-gage railway (equal to the distance by the Pennsylvania from New York to Chicago) had been laid; upward of 1,300 locomotives (three hundred more than are owned by the Atchison system) had been shipped overseas, and, had the war continued, we would have had in France by July, 1919, enough American cars to make up a train the caboose of which would have been leaving Paris when the engine was entering Berlin.

The transportation department had in operation between Tours, which was the headquarters of the service of supply, and Chaumont, which was the great headquarters, an all-American train, drawn by an American locomotive, driven by an American engineer, and, as a final touch, with its sleeping-cars in charge of former Pullman porters.

Thirteen billion dollars was to have been spent on ordnance for the first five million men.

The Quartermaster Corps caused the death of five hundred thousand Newchwang dogs over in North China because their skins are the best material in the world for aviator's uniforms. It operated the largest shirt-factory in the world. It met a shortage in needles by dispatching an agent to Sweden who returned with a million needles. It conducted two schools of coffee-roasting, and as a result the American soldier received a fresher cup of coffee than most of the folks back home and the Government saved two or three cents a pound.

The Quartermaster Corps spent $8,500,000,000 during the war—more than half of the total expenditures for the entire army. It developed the most highly specialized shoe ever made, purchased 33,000,000 pairs of them, carried them in 120 sizes—including such hitherto unheard-of sizes as 17EEE.

At the time of the armistice approximately 10,000,000 pounds of food a day were being shipped overseas.

All Americans should be proud of the great things their country did during the war.

EARLY AMERICAN LOVE-STORY RETOLD IN AN OLD LETTER

SOME intimate glimpses of life as it was lived in America in the late Colony days, before the beginning of the disagreements with England that ended in the Revolutionary War, are given in a letter dated 1747, recently discovered and published by the Boston *Transcript*. A romance also runs through these old pages. "The places of writer and recipient know them no more," comments *The Transcript*, "but the letter remains as when it left the hand then so filled with life. It parts the curtains of the long dead years and gives us access to the life of distant days and the heart experience of an individual soul." The letter follows:

STARBUCK PLANTATION, NEAR MADEPET,
NANTUCKET ISLE, Sept. 20, 1747.

My Own Dear Mother: It seems a very long time since you and my honored father, and my ever-beloved brothers and sisters, started for your new home. But I suppose you have at this writing reached your destination, and I think of you every day as marching and marching, following the lonely trail through the interminable forest, and sometimes I am tempted to complain in that my father thought it best to remove that far-away settlement. But my grandfather tells me that the entertainment of that thought would be unworthy of the daughter of a pioneer, and since it was thought best for me to remain behind for a season I must improve my time to the best advantage. This I try to do with cheerfulness, and Aunt Content is so kind as to say I am of service to her in our household duties, and in spinning and weaving.

Peradventure my letter should seem a puzzle to you, I hasten to say that I indite a paragraph or two at a time upon leisure, and when anything comes into my mind I straightway go to my uncle's desk and write it down. I do this, dear mother, that you may share in my pleasurable thoughts, and may know of my daily life. Also that my brothers and sisters may, in a measure, partake of my enjoyment.

The principal news that I have to tell you is that my cousin, Nathaniel Starbuck, Jr., has returned to Boston after his last voyage to China, and is now hourly looked for here. There are divers preparations being made for his welcomage.

My grandfather walks restlessly up and down the yard, with his stout stick, peering anxiously up and down the roadway by which our traveler must come. Uncle Nathaniel says with pride, "the boy will have many stories to tell." Aunt Content flits about with a smile on her face and tears in her eyes, concocting her favorite dishes of which her son used to be so fond. While dear grandma knits and knits, because she says: "'Thaniel never yet wore any stocking but of my making, and I must have a supply for him to take on his next voyage." I, even I, have a new blue gown made of Auntie's last web, which is the finest, softest flannel ever made, on the island.

My cousin is come. He is tall and lithe, with handsome hair and eyes; but his complexion is brown, with ocean winds and Eastern sun. He says it seems to him like a fairy-tale that I am the same little dumpling of a cousin that he used to toss in the air when he was last at home.

"This *New* Westinghouse Ignition Does the Job Better"

A hot spark at all speeds and all times—

Nothing in the operation of your motor-car, your motor truck or your tractor is more important. Few essentials, moreover, are more difficult to assure.

It's a big job—putting the spark where it's needed every time. That's why Westinghouse engineers—with all their experience—spent several years designing, constructing and testing before announcing as ready for use the new battery ignition unit which is being shown for the first time at the New York automobile show.

This Westinghouse unit—type SC—embodies a number of new features of design—features that make it rugged, long-lived and efficient.

In every respect this new ignition unit is a fit companion for Westinghouse starting and lighting equipment, which is used by more than twice as many automobile manufacturers as use any other make, though it is higher priced, and is to be found on cars of the highest quality, as the following list shows:

These 67 Makes are Westinghouse Equipped

Passenger Cars
- Allen
- American
- Argonne
- Barley
- Bellanger
- Case
- Climbers
- Crawford
- Cunningham
- Dorris
- Dort
- Gardner
- Gray-Dort
- Greyhound
- Halladay
- Hackett
- Holliers
- Hupmobile
- King
- Locomobile
- Lexington
- McFarlan
- Mercer
- Metz
- National Six
- Pan American
- Pierce-Arrow
- Porter
- Revere
- Standard
- Stearns
- Singer
- St. Louis
- Stanwood
- Stevens-Duryea
- Velie

Motor Trucks
- American Truck
- Day-Elders
- Denby
- Dual
- Duplex
- Garford
- Hurlburt
- Indiana
- Oneida
- Mutual Motors
- Mutual Truck
- Nelson Le Moon
- Northway
- Parker
- Pierce-Arrow
- Republic
- Riker (Locomobile)
- Service
- Tiffin
- Titan
- Sterling
- Walter
- Winther
- Vim

Funeral Cars
- Bradley Ford
- Cunningham
- Rock Falls

Fire Apparatus
- American La France
- Maxim

Mine Locomotives
- Milwaukee
- Baldwin

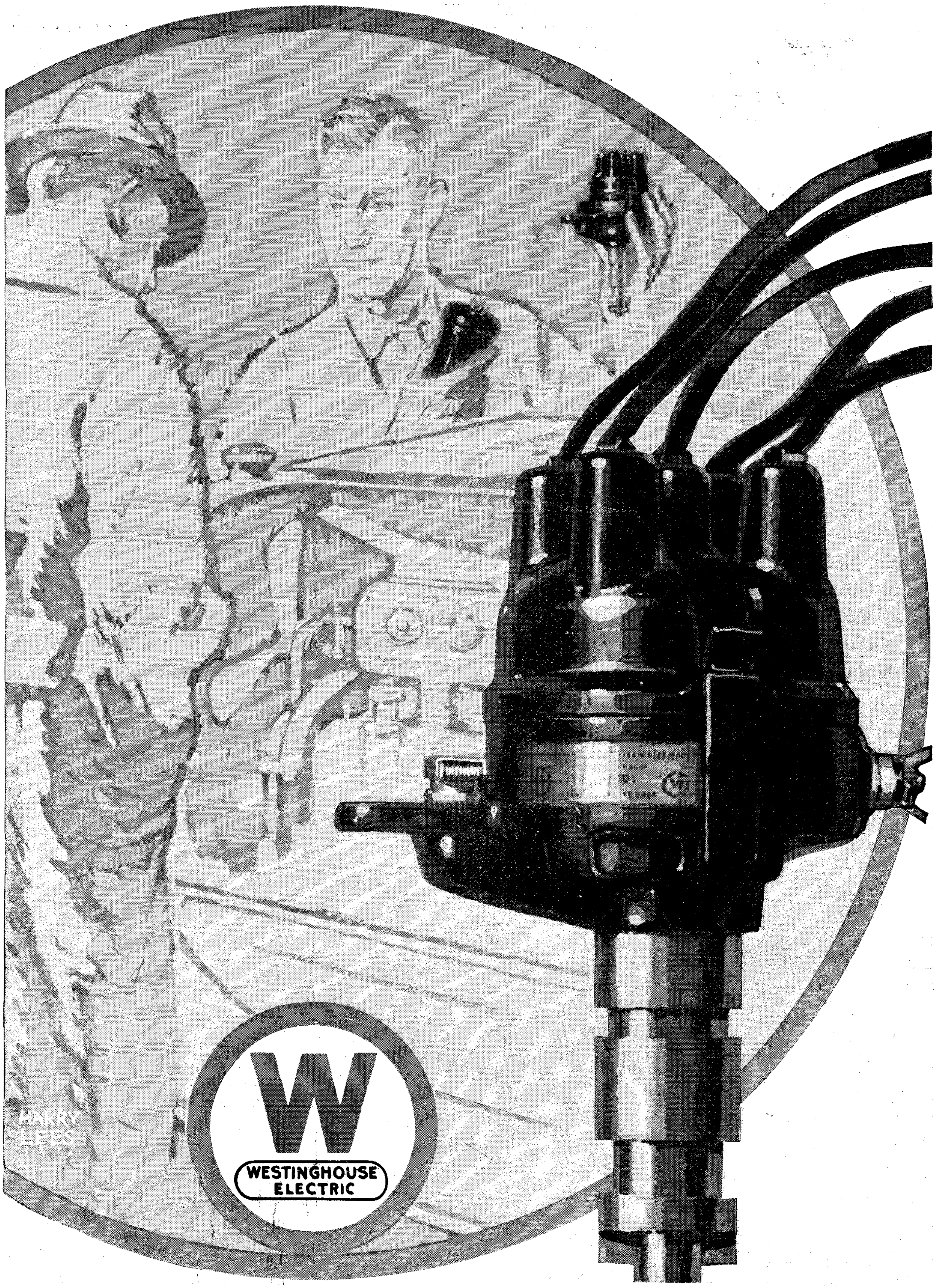
IF YOU ARE interested in a full description of the mechanical and electrical details of the new Westinghouse Ignition Unit, send for Publication 1606.

Westinghouse Service Covers the Continent—There are now 162 Westinghouse Service Stations, each one operated by men trained in the Westinghouse plant or by Westinghouse specialists in automotive equipment.

During the New York Automobile Show, headquarters of the Westinghouse Automotive Equipment Department will be at the Hotel Commodore—during the Chicago Show at the Congress Hotel.

WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY
Automotive Equipment Department
General Sales Office: 110-114 West 42nd St., N. Y. C.
Works: Newark, N. J., and Springfield, Mass.

Westinghouse
STARTING, LIGHTING & IGNITION EQUIPMENT


HARRY LEES
W
WESTINGHOUSE ELECTRIC

Westinghouse
STARTING, LIGHTING & IGNITION EQUIPMENT

He is much grieved to find you all gone, and is planning a hunting expedition, whose objective point shall be your far-away home. The neighbors all congregate around the kitchen fire and hear his wonderful stories and adventures, which he was relating all day long and far into the night. For all he has traveled nearly all over the world, he seems as pleased as a little boy to be at home on the old Nantucket plantation again. We are all as happy as can be with our divided hearts, and grandfather remembers you morning and evening at the throne of grace.

My cousin has brought a great many curiosities and presents for us all. One is a creamy, silken shawl for me, woven and embroidered with beautiful flowers; another is a gown of canton crêpe as white as snow, and they are so pretty I am sure I shall never dare to wear them. Grandma says they shall be kept for my wedding, but Aunt Esther says it is not seemly to put such thoughts into a maiden's head. Yet Aunt Content gave me the other day a whole piece of linen from the fall bleachery, to be kept, she said, against a time of need. At all events, my foreign finery is packed away in foreign gums and spices and is not likely to turn any silly maiden's head at present.

Cousin has returned to Boston, and yesterday sent by a trusty messenger another sea-chest. In it was a large box of tea, the first that was ever on the island. It is real Chinese tea, which Nat himself procured in China. It is of a green color, with little shriveled leaves, and when taken dry has a pleasant, spicy taste. Perhaps when I have an opportunity to end this letter I can enclose a sample quantity, that you may see what it is like. He also sends by the same hand a letter, saying that when he returns to Nantucket, the owner of the ship in which he voyaged, Captain Norris, will come with him from Boston to pay us a visit.

We are again making master preparations for visitors, and, if you will believe it, the large parlor, which has not been opened since Aunt Mehitable's wedding, is to be opened. The floor has been newly waxed and polished, and we have spread here and there beautiful mats and rugs which Cousin Nat brought from foreign parts; with the many curios and handsome things hung on the walls and spread on the table and mantelpiece, and the huge fire of logs which the sharp weather now renders necessary, you have no conception how finely the room appears. When I was admiring it this morning Aunt Esther rebuked me, saying, "the bright things of this life are of short duration." But dear, gentle grandma said with a smile that it was natural and right for the young to admire beauty, at which Aunt Esther seemed displeased. I sometimes think she dislikes me because I am young, but that can not be, yet I can not understand how, being my own sweet mother's sister, she can be so unlike her.

We have just had tidings that Cousin Nat and his friend, Captain Norris, intend to arrive here on the 31st of December. Uncle Nathaniel says we will have a tea-party and invite Uncle Edward Starbuck's family, Lieutenant Macy's family, and a few others to meet our distinguished guest and to sit the old year out and the new year in. We cooked a beautiful dinner and our guests all came. I wore my blue gown with some lace that grandma gave me, in the neck, and my own dear mother's gold necklace. I tied back my curls, that Cousin Nat will not allow me to braid, with a blue ribbon that he bought in London. Aunt Esther says that men dislike to see girls look so brave, but grandma kissed me and called me "bonnie bluebell."

Aunt Content has been much perplexed in her mind, the girl writer notes, because she knows not how to cook and serve the tea, and after her neighbors had assembled she confided to them her perlexity. The quaint record continues:

They all gathered about the tea-chest, smelling and testing the fragrant herb; Mrs. Lieutenant Macy said she had heard that it ought to be well cooked to be palatable, and Mrs. Edward Starbuck said a lady in Boston who had drunk tea told her it needs a good quantity for steeping, which made it expensive. So Aunt Content hung the five-gallon, bell-metal kettle on the crane, and, putting a two-quart bowl of the tea in it, with plenty of water, swung it over the fire. Aunt Esther and Lydia Ann Macy stayed in the kitchen to keep it boiling.

While I was laying the table I heard Lydia Ann say: "I have heard that when it is drunk it gives a brilliancy to the eyes and a youthful freshness to the complexion. I am afraid thy sister-in-law failed to put in a sufficient quantity of the leaves." So Aunt Esther put another bowlful of leaves into the gun-metal kettle. When the tea had boiled about an hour my cousin and Captain Norris arrived. The tea, which had boiled down to about a gallon, was poured into grandma's large silver tankard and carried to the table, and each guest was provided with one of his silver porringers, also with cream and with lumps of sugar. The captain talked to me before dinner, and I told him before I knew I was getting confidential that you were all off in the wilds. He said enterprise was what the new country needed, and that it was not best to have Nantucket peopled entirely with Starbucks; that I was one of them was plain to be seen, if my name was Wentworth.

I saw Aunt Esther looking at me so sharply that I remembered how often she told me it was not seemly for me to talk to men, and I presently became discreetly silent. But when dinner was announced, the captain took me out and made me sit by him. After grandpa had asked a blessing on the food, Aunt Content said to her son and friend: "I have made a dish of tea for you, but am fearful that I have not prepared it as it hath need and would like to have your opinion." Whereupon my cousin made answer: "As my loved mother desires my opinion, I must needs tell her that a spoonful of this beverage she has with such hospitality prepared for us would nearly kill any of us here at the table." The captain then said laughingly that aunt could keep it for a dye to color woolens. He further said he would, if she so desired, instruct her how to draw the tea himself. "And this young lady," he continued turning to me, "shall make the first dish of the beverage ever used in Nantucket."

Dinner being over, but they all remained at the table except Captain Norris and myself (for Aunt Content bade me assist him as he should desire), we searched for a suitable vessel in which to draw the tea. At least I saw Uncle Nathaniel's large gray stone pitcher, into which our guest instructed me to put as much of the tea as I could hold between my thumb and forefinger for each person, and a pinch for the pitcher. Then he told me to pour on boiling water sufficient for all, and set the pitcher on the coals and let it remain until it came to a gentle boil. The tea was then poured into the tankard which Aunt Content had made ready, and the captain carried it to the table for me and helped me to pour it into the porringers for the guests. He was so kind as to say it was the best dish of tea he had ever drunk.

We had a wholesome, dinner and an enjoyable one withal. Cousin Nat told stories and sang songs, in which latter recreation Captain Norris joined, and the happy New-year greetings took the place of good-by when our guests left for their respective homes. My cousin's friend still lingers for the shooting, and there is not much spinning or weaving done, it takes so much time for the cooking and eating and visiting.

He is very agreeable, and calls grandfather the "Miles Standish of Nantucket." I heard him tell Uncle Nathaniel that we have good blood, and that ever since he became acquainted with Cousin Nat he had conceived a great admiration for the Nathaniel Starbucks, and he said nothing about a wife. Perhaps he remains here so long on account of Aunt Esther, but, dear me, she is so prim (I write in all respect, dear mother), and he is such a jovial gentleman, I do not see how such a union could be harmonious. If he has regard for her it must be on account of the Starbuck blood.

Oh! My dear mother, how can I tell you! It is not for the love of Aunt Esther that Captain Norris remains, but me, your own little daughter, and all the Starbucks (indeed saving Aunt Esther, who declares I ought to be put back into pinafores) have given their consent that I shall be married and sail away with my husband, in my husband's ship, to foreign parts, to see for myself all the beautiful and wonderful things of which I have heard so much of late. But I will not give my consent until I have that of my father and mother first. So there is a company being made up to go with my Cousin Nat and Captain Norris, through the winter snow to your far-away home, and, after all, it will be the new friend of which I have written so much who will take this long letter to you. I am sure, dear mother, that you, who know my heart so well will not think it unseemly for me to hope that the Lord will guide your heart and that of my father to feel kindly disposed toward this gentleman, for, indeed, he is of good repute and is so kind as to be very fond of me, and I feel if I have your consent and that of my honored father, together with your blessing, I shall be very happy.

The captain declares laughingly that I am sending him off like a knight of old, to prove his love. I can not help thinking it strange his wanting to marry me, and when I said so one day he replied gravely it was all on account of the tea which got into his head, and indeed it may be so, for I was flighty and could not sleep much all night long after partaking of it, and even dear grandma says she would not answer for the consequences of what she might be led to do were she to make use of it every day, I send along with other small articles a quantity of this famous tea and a bit of the white crêpe that I shall (if it so seemeth best in the judgment of my honored father and dear mother) wear in good time as a wedding-gown.

I remain now and ever, your affectionate and dutiful daughter.

Ruth Starbuck Wentworth.

The Prestige of the Pioneer

Occasionally it happens that the pioneer in a certain field of human effort comes down the years with his leadership still unchallenged.

The pioneer is still the standard bearer. His leadership has become an institution. Men take for granted that his mature experience, his senior skill in his field will continue to give maximum merit to the thing he makes or does.

Prestige orders further progress. The whole public he serves, even his contemporaries, give generous recognition as each year the pioneer-leader meets that responsibility.

Delco enjoys the distinction of having been the first Starting, Lighting and Ignition System for motor cars,—as Cadillac enjoys the distinction of having been the first motor car to install it.

Each year since, because Delco has steadily maintained its leadership, Delco has been standard equipment on Cadillac cars.

Manufacturers of high-grade motor cars willingly pay more for Delco, not for the prestige which surrounds its name but for the quality with which Delco steadily increases that prestige.

Delco

Starting, Lighting and Ignition Systems

THE DAYTON ENGINEERING LABORATORIES CO.
STARTING LIGHTING IGNITION
DELCO
DAYTON, OHIO

SCIENCE AND INVENTION

Continued

WHERE THE RADIUM COMES FROM

THE greatest known deposits of the minerals now furnishing the bulk of the world's radium are in this country, in Colorado and Utah. Radium ores, we are told in a press bulletin of the United States Geological Survey (Washington), are generally found in connection with granitic masses—that is, in places where granite forms at least part of the rock of the country. The bulletin goes on:

> "Most of the original radium minerals, such as uraninite, samarskite, and brannerite, are black and have a shiny fracture and a high specific gravity. These minerals are rarely found in commercially valuable quantities. Pitchblende, which has the same composition as uraninite and the same general appearance except that it shows no crystal form, occurs in veins. It has been found in only a few places—in Bohemia, southern Saxony, Cornwall, and Gilpin County, Col. When these original minerals break down through weathering, other radium minerals are formed from them, such as autunite, torbernite, carnotite, and tyuyamunite.
>
> "Carnotite and tyuyamunite are the most abundant of these minerals and now furnish the bulk of the world's radium. They can not be told apart by the eye, for both are of bright canary-yellow color and are powdery, finely crystalline, or, rarely, claylike in texture. . . . The greatest known deposits of these two minerals are in southwestern Colorado and southeastern Utah, where both are associated with fossil wood and other vegetation in friable, porous, fine-grained sandstone. Small quantities of carnotite have been produced near Olary, South Australia. The only other deposits that yield tyuyamunite in notable quantity are those of Tyua-Muyun, in the Andiyan district, Ferghana Government, central Asiatic Russia (Russian Turkestan), where tyuyamunite occurs with rich copper ores in a pipe in limestone.
>
> "A drop of strong hydrochloric acid on either carnotite or tyuyamunite gives it at once a rich reddish-brown color, and the addition of a drop of water immediately changes the color to yellowish-green. The reddish-brown color shows the presence of vanadium, and the yellowish-green color the presence of uranium. . . . Surer tests may be made either with an electroscope or with a photographic plate. If a piece of radium-bearing ore is placed on a plate-holder containing a sensitized plate with only the cover of the plate-holder between the specimen and the sensitive film of the plate, the plate will be 'light struck' in from twenty-four hours to four or five days, the length of time consumed depending on the richness of the specimen. Specimens should never be placed on the plate itself, because the pressure of the specimen will give an effect that simulates light striking. This test may be made with other uranium minerals to which the acid test given would not be applicable.
>
> "Radium is a metal and is described as having a white metallic luster. It has been isolated only once or twice, and few persons have seen it. It is ordinarily obtained from its ores in the form of hydrous sulfate, chlorid, or bromid, and it is in the form of these salts that it is usually sold and used. These are all white or nearly white substances, whose appearance is no more remarkable than that of common salt or baking powder. Radium, radium salts, and radium minerals are not generally luminescent. Tubes containing radium salts glow because they include impurities which the radiations from the radium cause to give light.
>
> "Radium is found in nature in quantities so exceedingly small that it is never visible even when the material is examined with a microscope. Radium ore ordinarily carries only a small fraction of a grain of radium to the ton, and radium will never be found in large masses, because it is formed by the decay of uranium, a process that is wonderfully slow; and radium itself decays and changes to other elements so rapidly that it does not accumulate naturally in visible masses."

EATING BETWEEN MEALS

A MAN may walk a mile or more on the energy furnished by a single caramel. Or, to put the matter differently, one caramel too much requires a mile or more to "walk it off." This being the case, writes the author of an editorial in *The Journal of the American Medical Association* (Chicago, November 22), it is futile to think of counteracting the effects of much overeating by the mere taking of a "constitutional." Warnings against greediness are now in order, it appears. Now that the war is over, we are told, many of the restrictions imposed by governmental mandate, the exigencies of commerce, or a patriotic conscience need no longer apply to the behavior of our population. "Sugar and spice and everything nice" may once again be included in the diet of American homes. The writer goes on:

> "We may at length return to the consumption of those dietary luxuries that have attained great popularity in the United States. Candy is no longer tabued, nor is purchase restricted by a food administration. Strangely enough, the enforcement of prohibition has apparently increased the use of candy, as it has augmented the consumption of the sugar-containing temperance beverages. The calorific potency of alcohol is likely to be replaced by the fuel value of 'sweets' eaten here and there between meals.
>
> "It is commonly believed that these 'extra foods' consumed apart from our regular meals on the most varied occasions, frequently several times a day, play a relatively insignificant rôle in the total value of our food-fuel. Not long ago, however, Benedict called attention to the true value which ice-cream, soda-water, and various comparable popular American extra foods really represent in terms of calories, the standard units of food-energy. Some of the commonly served portions eaten in haphazard fashion on the spur of the moment may be equivalent to as much as five hundred calories, while one hundred-calory portions are anything but unusual. In a more recent contribution, the same investigators have brought further actual evidence of the unexpected food-value of many of the items innocently consumed without thought of possible nourishment therein by thousands every day. Prior to the recent inflation of prices, from fifty to sixty calories were frequently obtainable in so-called penny candies; in some of the cheap nut candies the yield even exceeded one hundred calories for the small coin that delights the child.
>
> "The eating of 'extra food' is by no means confined to children. The adult man and woman who depend on the meal-time food-fuel of from two thousand to three thousand calories a day indulge in candy as a pastime or eat an after-theater lunch for the sake of sociability—not because they feel the need of more food nor because they appreciate the magnitude of the diet intake. It will come as a surprize to most persons to learn on reliable authority that a single caramel, a nougatine, or a penny's worth of candy may furnish sufficient energy to supply the extra heat needed for walking a mile or more. Equally startling will be the news that the ingestion of three seemingly insignificant, medium-sized olives can yield the amount of heat liberated in a half-mile walk. We are informed that for a man of average weight to walk from the bottom to the top of the Washington Monument would require an extra heat-production of eighty calories. The energy expended in this not inconsiderable effort may be completely replaced by the consumption of less than half a doughnut, six walnuts, five large olives, or four pretzels. Perhaps, we shall learn from such facts how futile a 'constitutional' walk is in any attempt to combat the accumulating energy from undue eating between meals. Or possibly, on the other hand, the doughnut will gain a repute as a standby in times of muscular stress and thus retain in peace the unique favor that it won through the efforts of the Salvation Army in the days of military stress."

THE REMARKABLE MOROPUS, FORMERLY OF NEBRASKA

PARTS of seventeen of these beasts are now in the American Museum of Natural History, New York—the fruit of five years of exploration in Nebraska, ending only three years ago. The moropus is a very distant relative of the horse, which lived thousands of years ago both in Europe and America. It has always been a problem to naturalists, and the finds of the Museum in the fossil-beds of Nebraska have enabled naturalists for the first time to form some idea of where and how it lived. The description from which we quote was read by Prof. Henry Fairfield Osborn, of the Museum, before the National Academy of Science, and is printed in its *Proceedings* (Baltimore). Says Professor Osborn:

> "While very rare, it must have been perfectly adapted to its environment, because it survived the majority of perissodactyls. . . . . . .
>
> "The habits and habitat of the animal have always presented a very difficult problem. The skeleton presents the most noteworthy exception to Cuvier's law of correlation. All the foot-bones which were discovered since Cuvier's time . . . were grouped with the edentates, especially the plantigrade sloths. All the teeth which were discovered, on the other hand, were grouped with the perissodactyl ungulates. It was not until H. Filhol discovered the nearly complete skeleton . . . that he was enabled to prove that the [animals] were of composite adaptive structure. . . . . . .
>
> "Great light was thrown upon the structure of moropus through the explorations

This Sign Is For Your Protection

The outside of a garage doesn't indicate the kind of service you get within.

But the United States Tire Sales and Service Depot Sign *does.*

Only good dealers are permitted to display it. In any of the thousands of places you find it—you can know that it marks a place where you should get good tires and good tire service.

And good tire service means not only putting on your tires, providing air, testing your wheels for alignment and reliable repair work,

—but straightforward, honest advice as to the tires best adapted to *your own use.*

United States Tire Sales and Service Depot Dealers are in the enviable position of being able to meet—*and meet exactly*—the individual requirements of our customers.

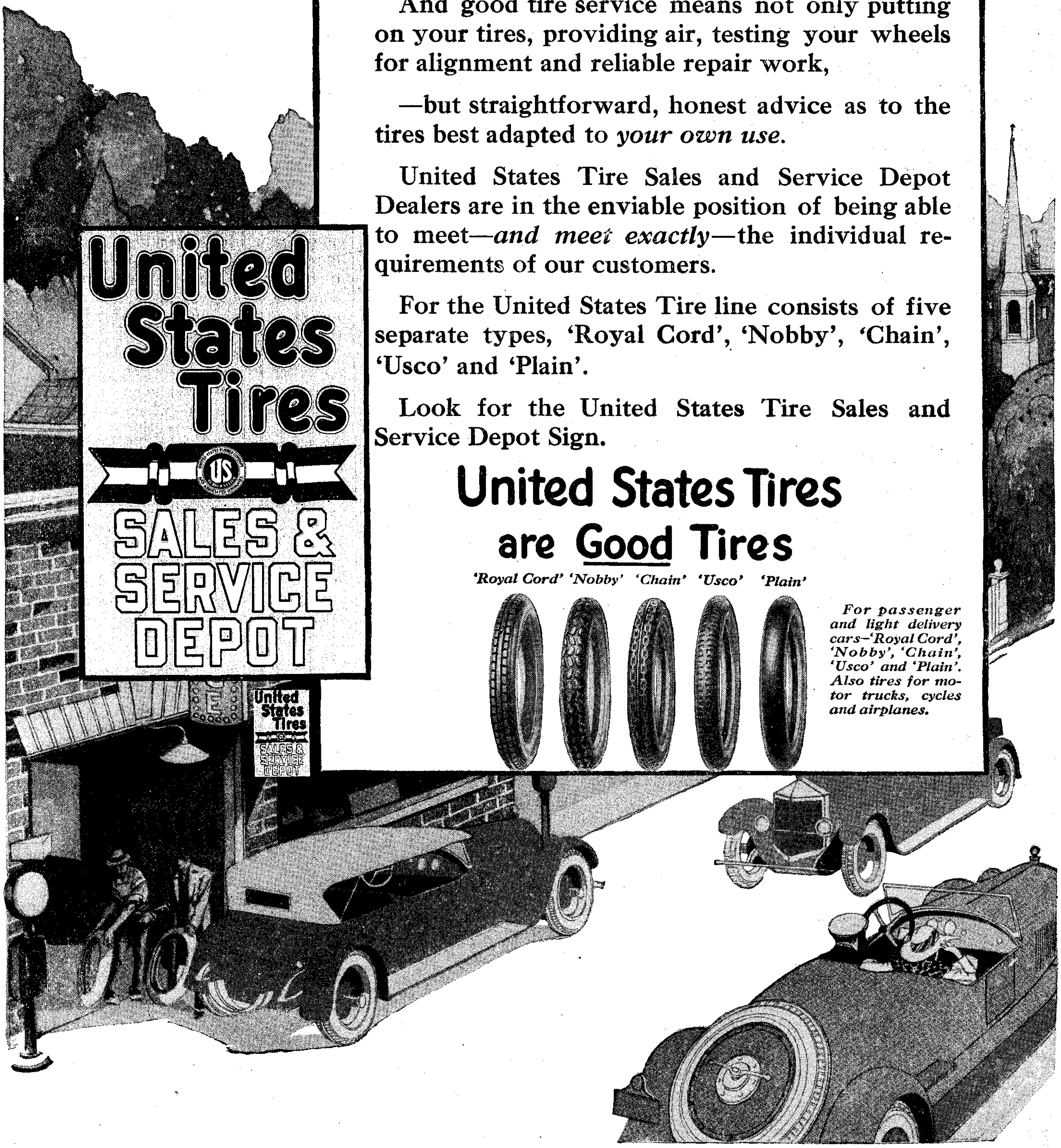
For the United States Tire line consists of five separate types, 'Royal Cord', 'Nobby', 'Chain', 'Usco' and 'Plain'.

Look for the United States Tire Sales and Service Depot Sign.

United States Tires
are Good Tires

'Royal Cord' 'Nobby' 'Chain' 'Usco' 'Plain'

For passenger and light delivery cars—'Royal Cord', 'Nobby', 'Chain', 'Usco' and 'Plain'. Also tires for motor trucks, cycles and airplanes.



SCIENCE AND INVENTION

Continued

of the Carnegie Museum by Holland and Peterson, described in 1914, from materials collected in the famous Agate Spring Quarry, Sioux County, Nebraska, discovered by James H. Cook in 1897. After the lapse of the Carnegie researches and explorations, the American Museum entered this quarry and through five years of continuous exploration (1911-1916) an irregular area within a square of about thirty-six feet yielded nearly complete skulls of ten individuals and skeletal parts of seventeen individuals all together. From this wonderful material it has been possible to supplement the descriptions of Holland and Peterson and to present for the first time the proportions and pose, by which we may estimate the habits of this animal. We reach the conclusion that the moropus type was not plains-living, but forest-living; that it was the seclusion of the forests which protected this type and which accounts for its great rarity in fossil deposits, for it is characteristic of forest-living forms that they are not readily entombed. We form an entirely different conception of the habits of the animal when we observe the extremely long fore limbs, which are not of the digging or fossorial type, and which thus belie the apparently fossorial or digging structure of the terminal phalanges. It appears more probable that these terminal claws were used partly for purposes of offense and defense, but largely for the pulling down of the branches of the trees. The animal was probably forest-living like the African okapi, with which in its general body and head proportions it has many analogies. Like the okapi it survived through retreat to the recesses of the forests."

EAVESDROPPING IN THE WAR

"LISTENING-IN" on all Allied telephone messages, the Germans were fully informed of the plans for many of the early attacks, with results, of course, highly unsatisfactory to the Allies. According to John Comeling, who contributes an article on "Coils of Defeat" to *The New Witness* (London), the device that made this possible was first used by the Germans early in 1915, and its existence was unsuspected by the Allies until September of that year. Shortly afterward the French and English adopted listening devices of their own. In the latter part of the war practically all telephone conversations had to be conducted as if in the actual presence of the enemy. Codes of various kinds were in daily use, and General Pershing's plan of detailing Indians to talk over the telephone will be appreciated in this connection. What the astonished German "listeners-in" made out of tactical information imparted in the Choctaw or Chippewa tongue we shall probably never know. To quote and summarize Mr. Comeling's article:

"I well remember that when I first went to France in September, 1915, the air was thick with rumors of spies among the civilian population. These rumors became a legend, and persisted more or less throughout the war, with great injustice both to the civilians and the troops.

"In November, 1915, an official paper was circulated to the effect that a civilian prisoner repatriated from Ruhleben reported that from the conversation of the prison guards he understood the Germans had invented an apparatus which enabled them to overhear all telephonic communications in the British lines, and that they were highly pleased with its results. Technical details had been discust, but these he had not been able to follow. It was evident from a comparison of dates that this apparatus had been in use at any rate since early in 1915.

"The 'listening apparatus,' as it was commonly called, thus dramatically thrust on the notice of the Allies, was a highly developed and sensitive instrument which was placed underground as near as possible to the enemy lines, and which enabled a man stationed at it to overhear any communication which depended upon a 'vibrating' as distinct from a 'direct' current within a certain distance. All telephones, and the bulk of field-telegraph instruments, come under this heading. A detailed technical description would be out of place here, but essentially the apparatus depended on the principle of the induction coil, and by its aid the instrument, which was connected direct to earth, could pick up all the minute leakages to earth from other instruments, and intensify them until they became audible to an expert listener. In conjunction with this was a 'tuning' attachment to cope with the multiplicity of the sounds intercepted, so that attention could, within certain limits, be concentrated on one particular conversation or message. Its range naturally varied greatly with circumstances, but there is reason to think that under ideal conditions it approached four miles. In any case it may be assumed that all telephone- and telegraph-lines within two miles of the front trenches were in 'the danger' zone, and of course a line starting within that zone and going to the rear would also be affected.

"In considering the effect of this listening apparatus, two periods are involved before and after its existence became known to us. In the former period its effect must naturally have been very great, since conversations would be unrestricted by any sense of danger.

"It is, for instance, probably a complete explanation of our disastrous failure in the attempt on the Aubers Ridge in the spring of 1915, a failure so appalling that all mention of it in the press was suppresst. It also explains the almost parallel case of Neuve Chapelle.

"It seems to have failed in the case of Loos, possibly because there happened to be no such apparatus in the sector. The Germans certainly knew of the impending attack, yet not precisely where it would fall. There is also the question of the costly French thrust at Lens from the south, in the affair of the Labyrinth, which may have been affected by this matter."

But there is an even more tragic side. In "normal" trench warfare, the date and time of a relief of troops in the line are of great importance to the enemy, who shells roads and approaches in the hope of inflicting serious casualties. All up and down the front, and particularly in the Ypres sector, up to the end of 1915, the enemy seemed to have an uncanny knowledge of reliefs and similar details, and terrible casualties were thus caused on roads just behind the line. We read further:

"Our Staff, perhaps at the time excusably, jumped to the conclusion of spies in the civil population. I do not say that spies do not exist, but surely in the light of this listening apparatus it is almost certain that the 'uncanny' knowledge of the Germans was gleaned from unsuspecting officers arranging details over the telephone.

"But to resume. After the disclosures to which I have referred, nothing happened for some three months, beyond a futile and quite arbitrary instruction that in the case of lines to the front, 'earth' wires should be extended to at least two hundred yards behind the fire trench. In the absence of any information as to the scope of the apparatus this was absurd.

"Shortly after this news came that the French (whether as a result of the disclosures or of independent investigation I can not say) had also brought out a listening apparatus, and this was brought into use by the British until a design of our own was perfected. The problems thus raised for both sides were very complex. In the first place, the telephonic system could not be dispensed with. It was necessary (1) to work out schemes by which liability to overhearing was reduced to a minimum, (2) to maintain a systematic watch over conversations and messages in the enemy lines, (3) to impress on every one concerned the danger of unguarded conversation and to take effective steps for its elimination.

"The German precautions are naturally not known in detail, but one feature was an ingenious conversational code. Thus, if an officer rang up another in the early morning and asked if he had breakfasted, the reply might be that he was going to have a meal of eggs in half-an-hour's time, which meant a trench mortar bombardment, and so on.

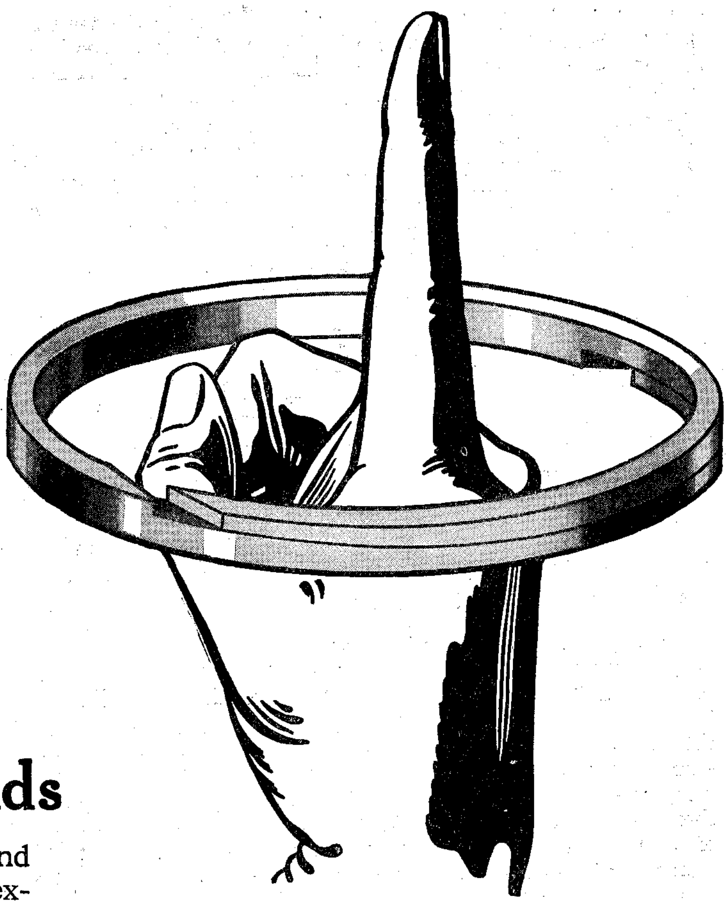
"The French practise varied. Broadly speaking, in quiet sectors only a few expert officers used the telephone, and conveyed all messages in a code which was frequently changed. In more active sectors, they tended to speak openly, but to leave so small a margin that the enemy had no time to apply information which he gained.

"In our own case, a system of code names was instituted about March, 1916, so that the utility of any conversation overheard would be diminished by ignorance of what units were involved. This system lasted with variations throughout the war, and might conceivably have realized its aim had it not been for the existence of the Staff.

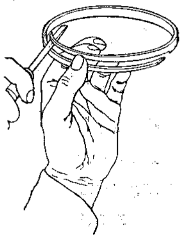
"In spite of the repeated warnings and reminders, the Staff to the last failed to cooperate in the matter, and in many cases openly avowed its disbelief in the possibility of anything in the nature of a listening apparatus.

"The remarkable mentality of the British Staff Officer was always evident in this connection as a matter of every-day practise. He was always too lazy to learn the codes, and really seemed to imagine that the divinity which hedged him extended to telephone systems, while they were in his use. After the telephone personnel had obtained a connection to the front system, carefully using all the codes, the Staff Officer would complacently give the game away by saying, 'Hello! is that the Tenth Loamshires? we are having a little show to-morrow, yes, just a little show, what!' And so on.

"In the last two years of the war, G. H. Q. seriously alarmed, sent out a long succession of circulars forbidding the careless use of the telephone, and promising horrible penalties, but officers, with the inspiring



The one-piece construction of the Inland, represented by the trademark, makes for easy installation and unusual durability.



And the spiral cut permits the Inland to expand and form a seal that is gas-tight and oil-tight.

Why they put their faith in Inlands

Car owners who have used Inland Piston Rings have learned from experience just what Inlands mean to them in the perfect performance of their engines.

The Inland is the only piston ring with a spiral cut—the only ring with a tension which holds the ring together as a one-piece unit, free from any gap for the passage of oil or gas.

And because of the "spring" in the ring, the Inland always fits tight against the cylinder walls, at the same time allowing freedom for the perfect play of the pistons.

This is why Inland Piston Rings mean so much to the motorist. They keep out the oil from the combustion chamber and keep out the gas from the crankcase. The engine operates perfectly—safe from the dangers of piston ring troubles.

Keep this in mind the next time your engine needs new piston rings.

Inland Machine Works

1636 Locust St. St. Louis, Mo.

INLAND
ONE-PIECE PISTON RING

It Used to be—"Half an Hour at Least"

Briarcliff Lodge, Briarcliff Manor, N. Y., has always been proud of its service, but it couldn't do the impossible.

No matter how swiftly the pen of the bookkeeper flew he couldn't be up to the minute all the time. No matter how agile his brain he couldn't exclude errors in every one of his accounts.

And unless the parting guest gave warning well ahead, he was almost sure to be kept waiting for his bill. Even if all the charges were in for golf, for laundry, for the tailor, for gas and oil and all the rest, the clerk had to take time to check up and balance the account.

Checking, rechecking, long hunts for errors that crept in in spite of every precaution—all this was part of the system that kept night clerks and day bookkeepers always busy, and always just a little behind.

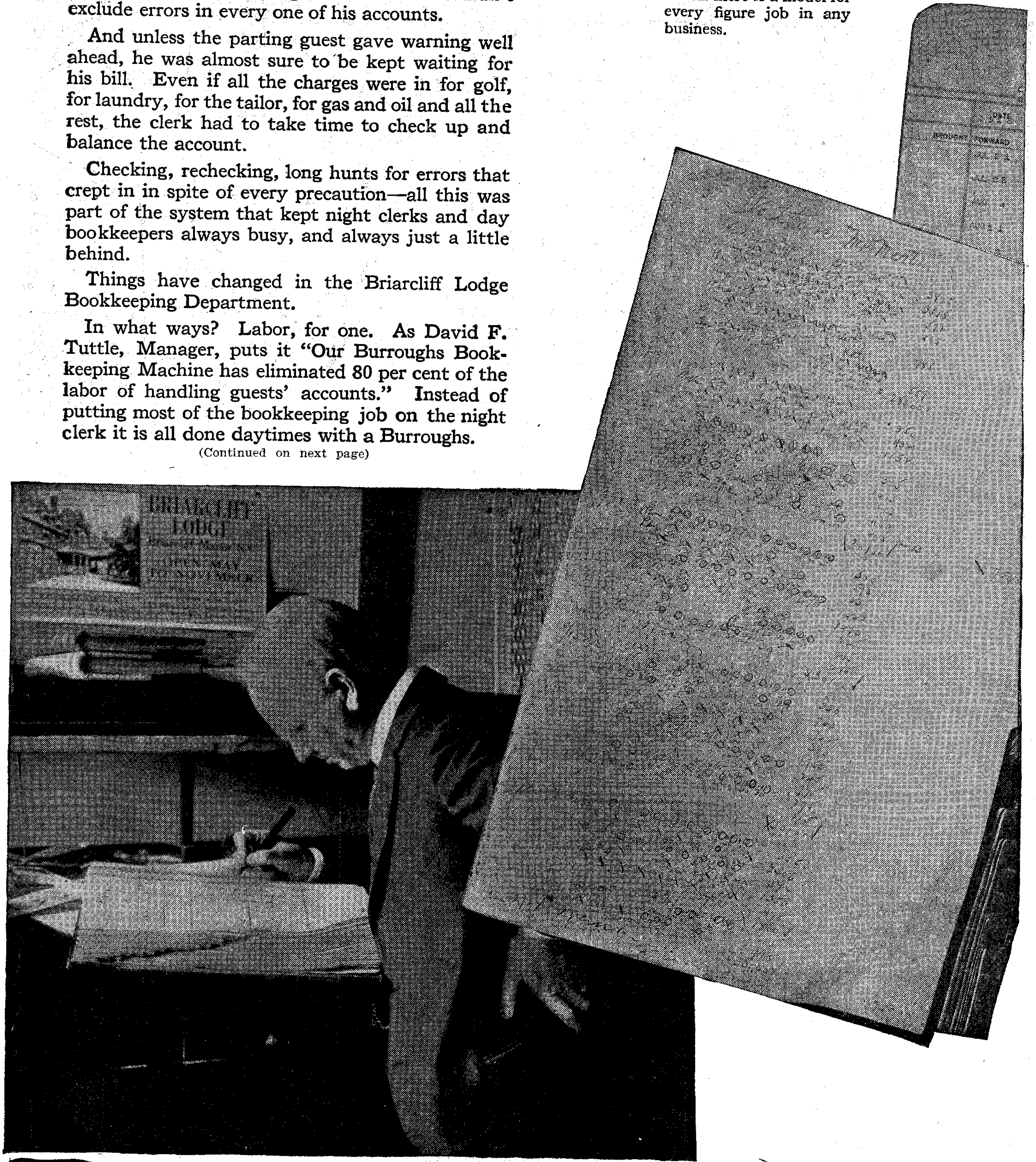
Things have changed in the Briarcliff Lodge Bookkeeping Department.

In what ways? Labor, for one. As David F. Tuttle, Manager, puts it "Our Burroughs Bookkeeping Machine has eliminated 80 per cent of the labor of handling guests' accounts." Instead of putting most of the bookkeeping job on the night clerk it is all done daytimes with a Burroughs.

(Continued on next page)

The A B C of Business

Adding, Bookkeeping and Calculating—the A B C of Business—are served by the three groups of Burroughs Machines in which there is a model for every figure job in any business.



Adding—Bookkeeping—Calculating Machines

Burroughs

NAME Chas Brown
209
STAY
RATE
MEMO
CREDITS
BALANCE
PROOF

Burroughs Machines are priced as low as $125. Consult your banker or telephone book for the address of the nearest Burroughs office—of which there are 213 throughout the United States and Canada.

Today—"Your Bill's Ready Right Now"

(Continued from preceeding page)

There's no checking from a guest ledger, no job of copying off items when somebody asks for a bill, no trial balance to worry about.

No matter how unexpectedly a guest announces his departure he'll find his bill all ready. His wife may have charged a purchase at the news-stand or his chauffeur may have bought gasoline only a few minutes earlier—no matter what the last-minute items may be they are all in the bill.

Another thing, the cost of each service and of each order of food is so accurately known that there is no danger either of the hotel losing money or the guest being overcharged.

Bills are always ready and always right at Briarcliff Lodge—a feature as characteristic of this hotel as are the cuisine, the service and the accommodations in which the management takes such pride.

Burroughs Bookkeeping Machines will print, add, subtract, automatically extend balances, and do away with the little errors that make pen-and-ink bookkeeping such a complicated tiresome, troublesome task; they will fit any loose leaf or card ledger bookkeeping system.

Adding—Bookkeeping—Calculating Machines

Burroughs

SCIENCE AND INVENTION

Continued

example of the Staff before them, paid not the slightest heed, and it is the curious truth that G. H. Q. was quite unable to cope with the trouble so far as officers were concerned. 'Discipline' was for the under dogs.

"One more delicious fact and I have done. A British Technical Officer perfected a telegraph instrument, which became known as the Fuller-phone, whose signals were not liable to interception at all. Here was a complete solution of the difficulty. It remained only to install it everywhere and prohibit all telephonic conversation. But the Staff knew of a better plan for turning one's whiskers green. It reserved the new instrument for ordinary routine work, and continued to talk tactics over the telephone, thus cutting out at a blow all the unimportant and confusing talk which had for years hampered the enemy in his efforts to intercept really important conversations. What balm there must have been in Gilead!"

"GRAPE OIL," A NEW PRODUCT OF THE VINEYARDS

PROHIBITION is not to ruin the grape-growers after all. They can still make raisins and sell grape-juice, and now comes Dr. J. H. Shrader, of the United States Bureau of Plant Industry, with a plan for making "something just as good" as cottonseed-oil out of grape-seeds. Tests have shown, says an editorial writer in *The Observer* (Charlotte, N. C.), that the resulting oil is edible and nutritious and may become a rival of olive-oil for cooking and for making dressings. Dr. Shrader also suggests the use for the same purpose of many other kinds of seeds, such as those of pumpkins, tomatoes, and other vegetables. We are now utilizing so much vegetable material that was formerly thrown away that an announcement of this sort is no longer surprizing. The editor of *The Observer* expects it to give "comfort to the growers of the vine," and it should be noted that even a return to anteprohibition status would not alter the availability of grape-seeds for this purpose. We read:

"The announcement . . . is of particular interest to the cotton and cotton seed and oil industry, so large and important in this section of the country as well as to the grape-growers, who are expected to be able to make up for the loss of their wine trade by utilizing the grape-seeds for food oil, supplementing their income from grape-juice.

"Dr. J. H. Shrader . . . in a paper read before the Division of Industrial Chemists and Chemical Engineers of the American Chemical Society, suggested that all waste of this character from vineyards and canneries be assembled at a center, so that there will be enough tonnage to make its fabrication profitable.

"'In the grape-juice industry,' he says, 'the grapes are prest in ordinary cider-presses to obtain the juice. The skins, seeds, and pulp remain behind in the cloths. The total tonnage of grapes prest for juice in the grape belts of New York, Ohio, and Michigan was ascertained directly from the firms for each of the past five years in order to strike a fair average. From these figures, a pomace yield of 20 per cent. was calculated, which in turn yielded one-quarter seed, one-quarter dry skins, and one-half water.

"'A method has been worked out and operated in the laboratory on a semicommercial scale whereby grape-seed can be separated from wet grape pomace without recourse to drying. The seed separation will enable the producer to take out his seed from the balance of the waste at each pulping and pressing station. This makes him independent of the necessity of shipping all of his waste to the central plant, when freight-rates make such shipment prohibitive.'

"Because of the shortness of the grape-juice pressing season, which lasts from September to November, this well-known agricultural chemist has estimated on a plant only large enough to dry the maximum amount of seed and then press it in winter months. He calculates that a charge of nine dollars per ton of raw material is allowed for drying and handling from freight-cars to storage bins, while fifteen dollars to the ton of dry grape-seed is allowed for expelling the oil and handling from the seed storage to the oil in tanks. This would include all overhead and management charges, except rent of property or interest on real-estate investment.

"Dr. Shrader believes that the efficiency of these plants could be increased by also extracting the oil from the seeds of tomatoes, as a great many such seeds are rejected in the making of catsup and in canning. Seeds from pumpkins and those from other vegetables can also be utilized, he says.

"It really begins to look as if the grape-growers of this country are not to be ruined by prohibition, after all."

INFECTION FROM POSTAGE-STAMPS

A LARGE majority of citizens probably lick their postage-stamps. Business firms that have a large correspondence use mechanical moistening-devices, but the easiest way to prepare a single stamp for use is to employ the tongue, transferring thereto part of the gum and whatever bacteria may be living in it. It has been proved that stamps harbor various germs of disease, and the popular method of applying them is undoubtedly unhygienic. An editorial writer in *American Medicine* (New York) thinks, however, that the danger of infection from stamps is in no way comparable with that from food and drink. Most of the kinds of bacteria found in the stamp-gum are found also in most of our mouths, where they lurk ready to infect us whenever they choose to assume the virulent stage. It is not likely, therefore, that stamp-licking will cause an epidemic; but it is not a nice habit, and we had better stop it, says the editor:

"The ubiquity of microorganisms is part of common knowledge. The mere presence, however, of bacteria does not necessarily constitute a menace. Numerous organisms are of inestimable service in assuring the purification of streams, the fertilization of the soil, and the destruction of undesirable material. The abundance of pathogenic bacteria forms the essential problem underlying the spread of disease.

"From time to time attention is drawn to many of the simple acts of life which contain a slight hazard to health, and, unfortunately, such items are too frequently overstrest. In the complexity of modern living, the high development of social intercourse, the growth of transportation, the increased contacts of human beings, it is impossible to live without some degree of exposure to a vast variety of incidents which might be productive of bacterial contamination. It is unfortunate, however, to have life consist of a series of fears. There are sufficient real dangers from bacterial carriers to appreciate the minimum dangers which may be said to lurk in various routine performances of daily life.

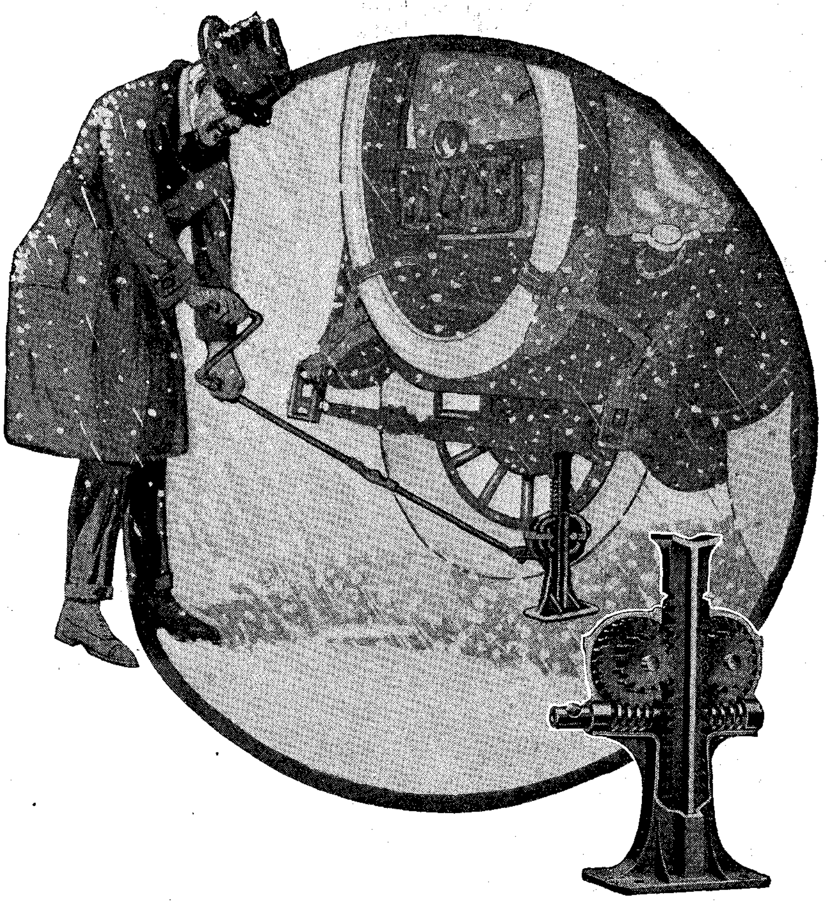
"Another example of suggesting a danger is to be found in the discussion of 'The Postage-Stamp as a Possible Source of Infection,' by J. Diner and G. Horstman, in *The Medical Times*. Postage-stamps were secured from fifty different places and note was made as to whether they were kept exposed on the desk or were held for sale in a drawer or cash-register. Laboratory tests were then made to determine the bacterial content of the stamps by shaking them out in a saline solution and then plating . . . on an agar medium and counting the colonies after forty-eight hours' incubation. No stamp was free from germs. Twenty contained colonies too numerous to count. There appears to be very little difference in the growth secured from stamps which were exposed on the desk and those held in the drawer. The estimation of the different colonies, however, is by no means significant. More suggestive is the fact that there were recovered and determined through the use of differential media and the examination of stained smears colon bacilli, staphylococci, streptococci, pneumococci, and diphtheroid bacilli.

"Unfortunately, no tests were made to determine the virulence of any of the bacteria recovered, wherefore it is difficult to determine what degree of danger was presented by the presence of these various organisms."

While it is undoubtedly true, the editor goes on, that had these stamps been moistened with the tongue, the possibility of such organisms entering the mouth would have been increased, it must not be forgotten that most oral cavities will reveal the existence of most of these organisms without making use of a postage-stamp. Were stamps a grave source of infection, a very large percentage of the population would undoubtedly be suffering from some infection due to this cause because of the commonness of the method of licking postage-stamps. He continues:

"The gum utilized for making the stamp adhere constitutes a favorable medium for bacterial growth, and for this reason, possibly, it may be said that stamps are more dangerous than some other articles to which the tongue may be applied. If one considers, however, the vast numbers of ordinary stamps daily wetted by the saliva, and then thinks also of the number of fingers that go into mouths, and the vast number of only partially clean eating-utensils which similarly enter the buccal cavity, there is a grave question as to whether there is a sufficient degree of possibility of infection from this source to warrant viewing it with any great alarm.

"The mouth is a significant channel of entry for pathogenic bacteria, and the



REES
DOUBLE WORM GEAR DRIVE
JACK

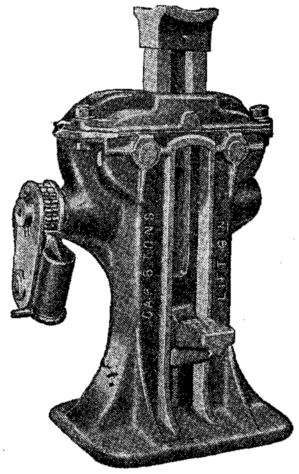
THE REES is the only Jack with the Double Worm Gear Drive,—the most efficient application of power known to mechanics. This cut-a-way view of the passenger car model illustrates in general the principle as applied in all Rees Jack Models.

Rees Jacks for Trucks

Many prominent truck manufacturers and operators of large fleets of trucks have adopted Rees Truck Jacks as their standard lifting tool equipment.

Rees Truck Jacks are made in a range of sizes which meet any truck needs. The same double-worm gear-drive principle of power application as used in the automobile Rees Jack is embodied in the truck models.

All Rees Jacks are rated conservatively. They do their full work easily with one man operating them, and have a reasonable overload capacity with an ample factor of safety.



A TOUCH of tire trouble on a cold, wintry day is quite enough to convince any motorist that the convenient and time-saving features of the Rees Double Worm Gear Drive Jack are worth many times its original cost.

You lift the Rees from the tool box, straighten the folding handle and attach it to the jack. From a standing position you slip the jack in place with the assistance of the handle, and turn. The heaviest car is raised quickly, easily and without getting down in the wet and slush.

Rees Jack No. 1, passenger car model, has lifting capacity of 4000 pounds, with an ample overload capacity to meet any emergency safely. At your dealer's, or sent prepaid upon receipt of price, $9.00; west of the Rockies, $9.50.

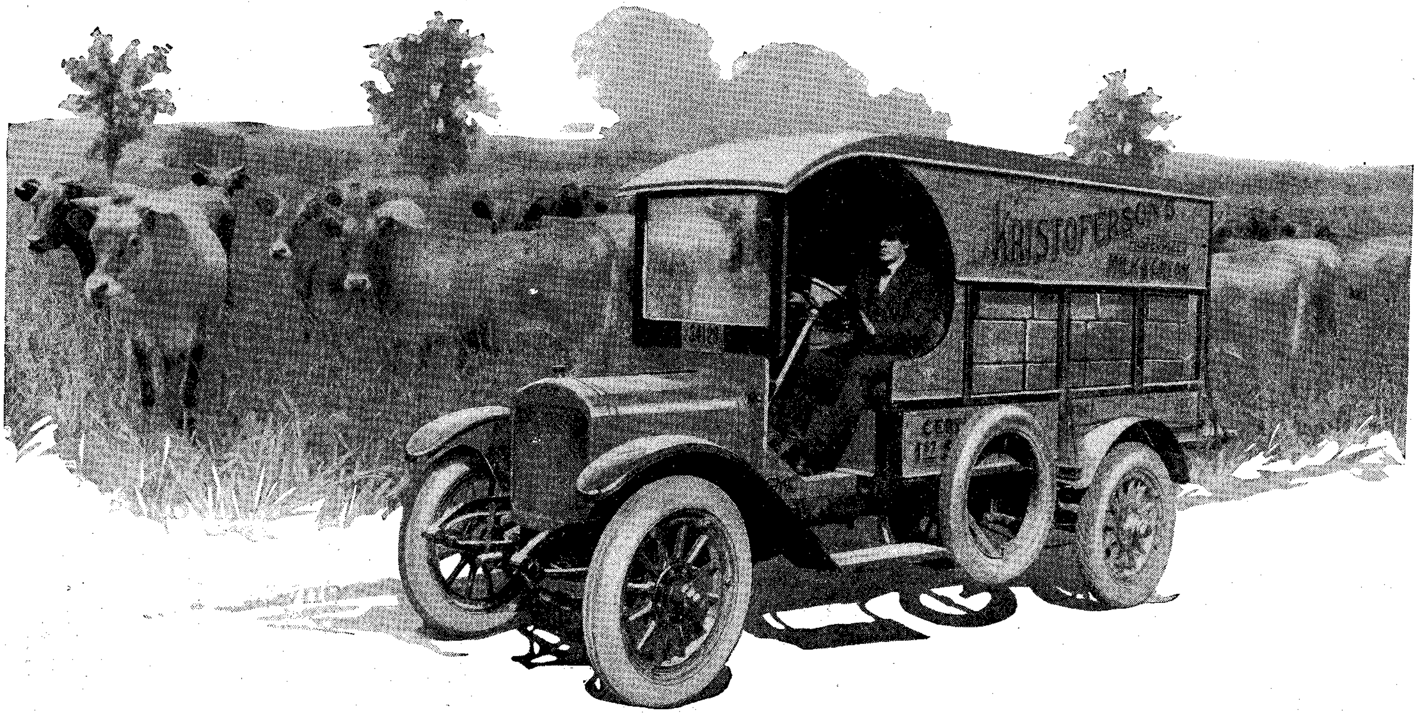
Iron City Products Company
Dept. 16, 7501 Thomas Boulevard,
Pittsburgh, Pa.

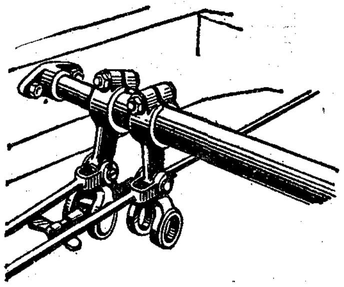
Exclusive Manufacturers of Rees Double Worm Gear Drive Jacks for Motor Trucks, Railway and Industrial Purposes.

GMC

General Motors Trucks

—on Dairy Routes





GMC Brakes are positive in action and great in strength; they hold the truck under most difficult conditions. Adjustments are made by turning large, simple, self-locking wing nuts on Brake rods, an operation which can be done without tools in a few seconds' time.

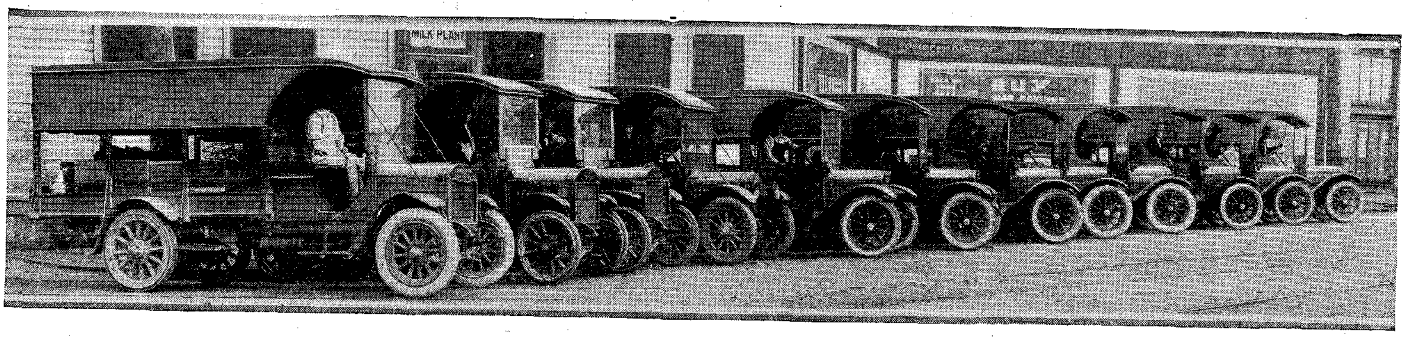
Sixteen GMC Trucks, most of them ¾ to 1 ton capacity, are delivering milk daily in Seattle and suburbs, for Kristoferson's Dairy. August Kristoferson, owner, says:—

> "We have used GMC trucks for the past five years, and have put them through the hardest kind of service. In the meantime we have tried two other makes of trucks, the use of which has proved that GMC's are the best trucks we can get for our business. We might add that our first GMC is still on the job, and never misses a day. We are now standardizing on GMC trucks with a fleet of sixteen operating in the city of Seattle."

GMC Model 16, ¾ to 1 ton, was the model selected as standard in its class by the War Department. GMC Trucks are backed by the General Motors Corporation, the strongest organization in the automotive industry.

GENERAL MOTORS TRUCK COMPANY
PONTIAC, MICHIGAN

(543)



unclean mouth is a potent source of danger to health. A large variety of disease-producing organisms have been found in the mouth, some of which are dangerous to the individual and others which apparently do him no harm. The sterile mouth probably does not exist, and a certain degree of protection has been developed by the mucous membrane, so that there is more or less general success in overcoming the large proportion of the supposedly infective bacteria. Under these circumstances the mere demonstration of the bacterial content of postage-stamps does not serve as an indictment against them from the standpoint of public health. The hygienic lesson that people should not lick postage-stamps is certainly sound; but, nevertheless, this practise is scarcely to be construed as a potential danger compared with the eating and drinking which are so essential for sustenance, but, nevertheless, are responsible for a large measure of bacterial contamination of the oral cavity."

THE COLOR OF BABIES' EYES

THAT babies almost invariably have deep blue eyes during the first weeks of life is asserted in an editorial by *The Journal of the American Medical Association* (Chicago). Those of us whose eyes are black or brown acquired this tint later in life. The change doubtless takes place at different times in different countries and races. We have no universal statistics, but in Bavaria three-quarters of the babies are still blue-eyed at three months, 70 per cent. at six months, and 53 per cent. at one year. Only 32 per cent. kept on being blue-eyed until they were fully grown. In this case 68 per cent. of the adult population had changed the color of their eyes since early infancy. This variability of eye color does not seem to be popularly known or appreciated. The writer of the article mentioned above ascribes it to deposition of pigment in the iris as the child grows, the blue iris being an evidence of deficient pigmentation. He says:

"Modern investigations have furnished a clue to the explanation of the color changes in the iris during early infancy. The blue color is alleged to be due to the paucity of pigment in the stroma of the iris. This tissue is still very thin in early life, so that the posterior layer of pigment in the eye is plainly apparent through it. With increasing age the stroma thickens. If no further pigmentation takes place in it, the iris tends to manifest a light blue or a gray shade; but when pigment is deposited in the iris layers, this organ becomes brown. Even in negro infants the iris may be blue in early life.

"The progress of the changes of color shows some uniformity when large numbers of infants are observed. Doubtless they vary for different localities and races, which are well known to exhibit characteristic eye colors that show a hereditary constancy. The blond complexion of the Scandinavians is associated with the light blue, or less pigmented, iris. In a group of persons examined in Munich, only 32 per cent. of the adults retained the blue iris. Among the children of these persons the rate of alteration in iris color varied considerably. In the first three months of life three-quarters of them still retained the blue color; in six months it was still characteristic of 70 per cent. of the infants; at the ages of nine months and one year the blue-eyed infant population represented 63 per cent. and 53 per cent., respectively. These data thus indicate the slow progressive pigmentation of the eyes leading to darker iris colors in the Bavarian groups examined.

"Schindler has called attention in this connection to observations made in Pfaundler's clinic at Munich on a possible correlation between the rate of pigmentation, with corresponding change in the color of the iris, and the nutrition of the infant. According to her, the iris of many malnourished young, particularly among those suffering from somewhat chronic disturbances of digestion or metabolism leading to atrophic manifestations, may exhibit a change of shade at an age when healthy infants as a rule still retain the blue color. The appearance has been described as a dirty gray shade, sometimes fusing into a brownish tint.

"If the premature pigmentation of the iris in early infancy is, in fact, a symptom of severe metabolic disorder—a suggestion which further careful clinical observation should help to establish or refute—its cause becomes an immediate occasion for speculation. In the absence of further experimental investigations on the subject, the Munich pediatricians conjecture that the darker color of the iris of malnourished infants is due to a deposition of pigment arising from augmented disintegration of blood pigment. . . . By analogy, a deposition of pigment elsewhere might be expected. At best, however, this is theorizing, for it is not even known whether the pigment of the iris is actually derived from that of the blood."

"SOUNDS" AND "NOISES," AND THEIR QUALITIES

WHEN is a noise really "noisy"? When is it so loud as to become objectionable? An editorial writer in *The Electrical Review* (London) reminds us that we have at present no method of specifying the loudness or characteristics of a sound, unless it is a musical note. We have, it is true, imitative words for certain types of noise—words like "crash," "bang," "tinkle," and "rattle"; yet these give only a rough indication of what the noise is like. The recognition of certain noises is very important, but there is generally no way of describing them in words. The same is true, of course, of certain other sensations, such as smells and tastes. Who could tell a person who had never seen an apple, for instance, how to recognize it by taste? Or who can put into words the odor of a rose or of sulfuretted hydrogen? With regard to sounds, the writer of the *Review* editorial thinks we need not despair of finding some verbal method of description and measurement; but he gives no hint of how to arrive at it. He writes:

"The engineer is responsible for a vast amount of the noise in the world, and, equally with the general public, he suffers from the discomfort and mental fatigue which it produces. In fact, he often suffers more acutely than the layman, for, in addition to the physical assaults on his tympana of a noisy tram-car or a squeaking wheel, his engineering instincts are affronted by the mechanical inefficiency and destructiveness which the sounds denote. Useless in itself, like pain in the animal world, noise may serve the purpose of calling attention to conditions which, unchecked, would lead to disaster. The roar of a badly constructed gear-drive indicates a state of affairs which will prematurely terminate the life of the mechanism, and cavitation noises in a pump similarly warn the initiated that the impeller will come to an untimely end. Noises of this kind, therefore, cost money to produce, not only by the destruction of machinery, but also on account of the inefficiency of working which the noise denotes. The earlier types of motor-omnibus on the streets of London were said to have been withdrawn because 'the noise they made could not be produced for 11*d.* per mile,' and there is much wisdom in the statement.

"Many kinds of noise, of course, do not indicate a serious mechanical loss of efficiency. The din of a boiler-shop and the racket of a shipyard are cases in point. The effect of such noises on cost is an indirect one. Quietness would not bring about any noticeable saving in power or material, but it would no doubt bring about an increase of production by increasing the comfort and endurance of the workers, facilitating the transmission of orders, and possibly by reducing accidents. However, even when noise can not be shown to be actively injurious, it is to be condemned on account of its very uselessness. The production of noise is an infringement of the rights of every one unwillingly subjected to it; and, in extreme cases, the law can be invoked in support of such rights.

"Since artificial noise is so constant and exasperating a condition of our daily life, it is rather curious that no serious attempt has been made to define permissible noises on a scientific basis. Public motor vehicles which are too noisy are ordered off the streets by the police, who depend, we believe, entirely upon their own judgment and common sense in taking action. Tramcars, however, appear to enjoy immunity from such control, and may thunder along with an intolerable din. Certain kinds of noise are permitted, while others are forbidden, yet no one can define either the intensity or the pitch of a sound in relation to its legitimacy. Devices exist for the measurement of electricity, heat, or light to any required degree of accuracy. The intensity and distribution of light in our streets and rooms can be readily determined by means of the photometer, but nobody yet has devised an instrument for rendering a corresponding service as regards sound. The student of acoustics busies himself with musical notes and their properties, and the really practical problem of measuring every-day noises is entirely neglected.

"The absence of any method of specifying sounds, either by comparison with some easily reproducible standard sound, or in some more fundamental manner, is a greater drawback than is often realized. For example, when an observer has learned for himself to distinguish the sound made by a submarine amid the chaos of water-noises heard in the hydrophone, there is no way in which he can record his knowledge or impart it to any other person. Similarly, the cry of the cuckoo or the song of the nightingale would be sounds irrecoverable as the note of the dodo with the extinction of the species which uttered them. The gramophone, it is true, will preserve some sounds for us with reasonable fidelity, but it affords no help to any one wishing to impart the idea of a sound to another man by words or writing. Something much more fundamental is wanted, which will represent the air vibrations either visually, as a graph, or to the intelligence by means of numbers. In these days of refined physical measurements, it should not be impossible to devise something of the kind required, so that the investigator could study sounds of all kinds in a quantitative and, therefore, scientific manner, and the engineer could attack the problem of noise from the standpoint of a definite knowledge of the particular features which render certain sounds objectionable."

DYNAMITE IN THE SUGAR-BOWL

THIS startling title is camouflage for a sober account, contributed by E. T. Lednum to *The Du Pont Magazine* (Wilmington, Del.), of the way in which the manufacture of explosives is linked with the all too small production of sugar. Dynamite, in brief, blasts the limestone that is an essential factor in the process of obtaining the sugar from sugar-beets, and it is also used, in many cases, to improve soil conditions for growing them. Sugar-beets, Mr. Lednum tells us, are grown successfully in many States, of which Colorado, Michigan, Ohio, Utah, Idaho, and California are the largest producers. In Weld County, Col., it is reported that seventy thousand acres of sugar-beets have been contracted for. If a normal yield is obtained, the sugar-beet producers will receive approximately nine million dollars. This will make Weld County, Col., the largest sugar-beet-producing county in the United States. He goes on:

"As with any other crop, soil, subsoil topography, and climate, all figure in the growing of sugar-beets. Almost any fertile soil capable of producing other good crops, if properly handled, will be satisfactory for sugar-beets. It is impossible for the beet-roots to penetrate a surface soil underlaid with a hardpan. If the hardpan be a close, compact, earthy formation, however, the condition can be overcome by blasting with dynamite of proper strength; but if the hardpan be of rock and close to the surface, little can be done to improve its condition for sugar-beets.

"Favorable topography is of great value. Hilly country is not generally satisfactory, especially if the hills are likely to wash. Gently or moderately rolling land is the most desirable in sections where sugar-beets are produced under rainfall. For irrigated lands, however, it is preferable that soil surface be sufficiently level to permit of uniform irrigation.

"Climate is one of the most important factors. The temperate regions are most successful as sugar-beet-producing sections. The pulp is disposed of as fodder for stock. The raw juice is carried through heaters to the mixing tanks, where milk of lime or saccharated milk is added. After the heating and mixing, the juice is carried into tanks, where carbonic acids is introduced in order to neutralize the lime. From these the juice is carried to the filtering processes and through carbonation tanks to insure clear juice.

"The process from this point comprises sulfitation, refiltration, reclarification, again refiltration, boiling and crystallization, separation, and granulation. Then the product is ready to be placed on the market for consumption.

"Explosives blast the limestone from which saccharate milk of lime, used to purify the raw juice, is produced. Limestone and coke in known quantities are burned in a lime-kiln. These kilns are located at the beet-sugar refineries, as the gas produced in the kilns is utilized in the sugar-refining process. In the 'Steffens' process of refining, the burned lime is passed to a crusher, elevated to the grinding-mills, where it is ground to a fine powder, which must practically all pass a two-hundred-mesh sieve. The powdered lime is then elevated to a storage bin. From the storage bin it is passed through scales to the coolers, where it is mixed with a solution composed of molasses and the 'sweet' water from the saccharate filter process. The cakes from the filter process are carried to the mixing tanks, where they are mixed with sweet water from the carbonic process. The resulting saccharate of milk is then carried to the raw-juice mixing tanks and mixed with the raw juice. The quantity of lime used is determined by the quality of the beets, the fineness of the powder, and the temperature maintained in the molasses solution. A very high temperature, coarse powder, or too rapid addition of the lime causes the latter to hydrate. Partial hydration of the lime can not be avoided. If the factory treats only its molasses production, additional lime is necessary for the juice. The consumption of limestone will vary with the quality of lime, and, with practise in sugar-beet refineries where the 'Steffens' process is not used.

"Lime, in conjunction, generally, with sulfur dioxid gas, is the most important chemical used also in the manufacture of raw cane-sugar. The amount of lime used in proportion to the tonnage of cane-sugar, is, however, much less than in beet-sugar manufacture; nevertheless, the total quantity of lime used in the cane-sugar industry is large in the aggregate. Thus dynamite finds a necessary altho indirect use in preparing sugar for table use."

IS AUTOMATIC TRAIN-CONTROL COMING?

WHAT is being done to install some system of automatic train-control on our railroads? The phrase, as our readers will remember, means the avoidance of a collision by actually stopping the train instead of simply notifying the engineer by signal that he must stop it. No mechanism is perfect, but the human brain, when used mechanically, seems particularly prone to failure. Hence many railway accidents which it is now generally acknowledged are avoidable. An editorial writer in *The Railway Review* (Chicago) believes that much ought to be done within the next few months toward the settlement of this question.

The Railroad Administration has taken steps in this direction, by the appointment of a train-control committee, which has made personal investigation of experimental train-control installations. The interstate and foreign commerce committee of the house of representatives has also been conducting an investigation of the practical operation of automatic control systems. He goes on:

"A committee of the Signal Division of the American Railroad Association, which met in Chicago last month, submitted the requisites adopted by the automatic train-control committee of the United States Railroad Administration last February. In the discussion which followed it was brought out that systems of automatic train-control, promoted by several manufacturers through private enterprise, are now available, and some of these are in successful operation on heavy traffic railroads. Further, it was urged that signal engineers give more attention and encouragement to this line of development than had been the experience in the past.

"We believe it to be true that railroad managements, in general, have not encouraged the development of automatic train-control, and about the only line of defense which it has seemed could be made consistently was that trial of automatic train-control systems in earnest would result in a popular demand for general equipment of railroads with such devices in advance of the financial ability of the railroads to undertake the same.

"It will be remembered that, for a number of years, there was a popular demand for all-steel passenger equipment, and it was not long after one of the large railway systems began to equip its trains with such cars until all-steel passenger coaches and sleepers became a familiar sight throughout the country. There can hardly be any question but that whole-hearted experiments with automatic train-control on a number of railroads would soon result in developing satisfactory operation therewith, and that a popular demand for the general equipment of railroads with such apparatus could hardly be resisted. As to the mechanical problems involved we doubt if there is, in the minds of signal engineers, any serious difficulty. . . . The development of automatic block-signaling on railroads has been one of gradual progress from the start, and the end is not yet. In regard to automatic train-control it is hardly conceivable that any difficulties would arise which could not be overcome by perseverance."

What, then, is essential to put automatic train-control on a desirable footing? The writer believes that the matter is in the hands of Congress. There must, he says, be such leeway in the earning capacity of the roads, when they are turned over again to their owners, and such restoration of confidence with investors, that capital can be raised for large improvements and new construction generally. The highest development can not be expected unless the prospect for liberal earnings shall be improved. The cost of equipping a line with a suitable installation would probably be at least $1,000 to $1,500 per mile of either single- or double-track. To conclude:

"The sum and substance of the matter is bad collision accidents continue to happen

© CENTRAL NEWS SERVICE

Great work! Twenty minutes after some of the important Peace Conference speeches were delivered, mimeographed copies were ready for distribution and consideration. In Paris, in the heart of the whirl of world events, the Mimeograph with stout and swift dependability did yeoman service. Some of the work of the Peace Conference would have been quite impossible without it. Speed and accuracy were there indispensable. And the Mimeograph met the great test—just as it is doing in governmental, business and educational institutions throughout the civilized world. With amazing rapidity and fine exactness it reproduces typewritten sheets, maps, drawings, forms and the like—first copies ready in a few minutes—and thereafter five thousand an hour. Stencils will run thousands of copies without renewing. All done at small cost. Great work, that! Why not know more about it, *now?* Get booklet "L" from A. B. Dick Company, Chicago—and New York.

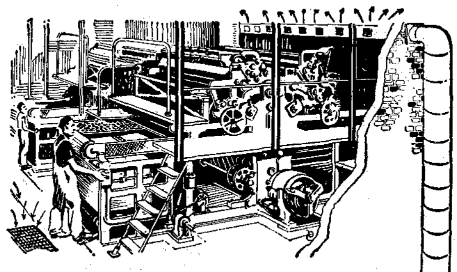
MIMEOGRAPH
EDISON-DICK

B. F. STURTEVANT CO. BOSTON U.S.A.
Sturtevant
PUTS AIR TO WORK

Air Keeps Things Moving

AIR is free. Everyone uses it. Yet few use it in the many ways it can be used. Properly controlled, moving air can do some profitable work in your plant. For the past sixty years it has been our work to make the air do your bidding. Today we make air do more industrial work than most manufacturers realize. There is no doubt that the use of air will permit you to operate under lower production costs.

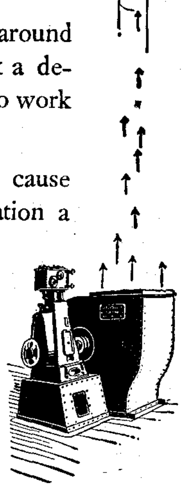
Fresh air does away with the three-o'clock slump



In a large printing plant it was noted that around three o'clock every afternoon production took a decided slump. The men were willing enough to work hard—they simply were forced to slow up.

One of our engineers pointed out that the cause was lack of pure air, and after careful calculation a Sturtevant Ventilating System was installed.

This plant now runs through to quitting time at much better speed. It was simply a case of supplying enough air to the men—clean air, air that could build energy.

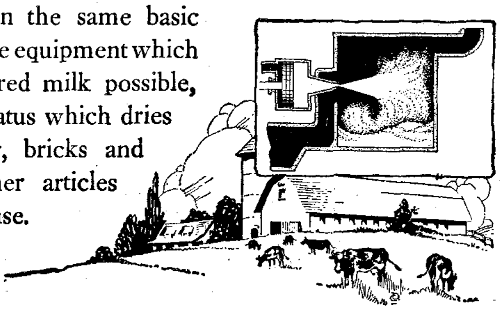


Powdered milk is made possible by air apparatus

You have very likely heard of powdered milk—pure, fresh cow's milk from which the water has been extracted. The water is taken from the milk by currents of dry, heated air which come in contact with a spray of the liquid milk.

Air apparatus has made it possible to ship fresh milk thousands of miles away from where the cow was milked, in small cans for families or in barrels for bakers, confectioners, and large users in general.

Working on the same basic principles as the equipment which makes powdered milk possible, is other apparatus which dries lumber, paper, bricks and numerous other articles of every-day use.



Our business is to take the *air condition* in a plant as we find it and then change it to *the way it should be*. This includes air conditioning, drying, cooling, heating and ventilating, air conveying, mechanical draught, and vacuum cleaning. To learn how air can be used in your business, write, phone, or wire us. State the exact nature of your business. We will then forward you bulletins describing the use of air in your business. Or, if you specially request it, we will send a representative to visit your plant and go over your problem with you. Address:

B. F. STURTEVANT COMPANY
EUGENE N. FOSS, President
Hyde Park, Boston, Mass.

or one of the following 24 Branch Offices in the United States and Canada

Atlanta, Ga. . . . . . 57 East 13th St.
Boston, Mass. . 555 John Hancock Bldg.
Buffalo, N. Y. . 101 Bedford Ave., Nye Park
Chicago, Ill. . 530 S. Clinton St.
Cincinnati, Ohio, 604 Provident Bank Bldg.
Cleveland, Ohio . . 330 Guardian Bldg.
Dallas, Texas . . . . 4004 Rawlins St.
Detroit, Mich. . . . 406 Marquette Bldg.
Hartford, Conn. . . . . . 36 Pearl St.
Kansas City, Mo. . . 412 Reliance Bldg.
Minneapolis, Minn. 804 Metropolitan Life Bldg.
New York, N. Y. . . 52 Vanderbilt Ave.
Philadelphia, Pa. . . . 135 No. 3rd St.
Pittsburgh, Pa. . . . . 711 Park Bldg.
Rochester, N. Y. . . 1108 Granite Bldg.
St. Louis, Mo. . 2086 Ry. Exchange Bldg.
Salt Lake City, Utah . Walker Bank Bldg.
San Francisco, Cal. . 759 Monadnock Bldg.
Seattle, Wash. . . . 1134 Henry Bldg.
Washington, D. C., 1006 Loan & Trust Bldg.
Winnipeg, Manitoba: Reliance Equipment Co., Ltd., 914 Somerset Block
Toronto, 210 Lumsden Building
Montreal, 404 New Birks Building
Galt, Ontario

STURTEVANT ENGINEERING COMPANY, LONDON

with the usual frequency, and progressive railway managements are convinced that even the best of our systems of automatic block-signals do not protect traffic as securely as would be the case with automatic train-control. In one sense such may be considered as an extension of automatic block-signals, or one more step toward complete safety of operation.

"It need hardly be said, in addition, that the installation of such equipment must necessarily be expensive and that, in the end, the public must bear the expense. In conclusion, let it be said that if Congress, in turning back the railroads to private operation, will provide liberally enough for railroad earnings, the managements of these properties will not be delinquent in developing automatic train-control. If there were less agitation about putting a death-watch on the prosperity of the roads under private control, with a view to gobble up any excess earnings for the benefit of this or that class, there might then be more encouragement for railway managements to think of laying out liberal programs of improvement in many ways, and among these to meet the evident need for automatic train-control."

"SALTING" A MINE

A POOR mine is said to be "salted" when good ore is secretly deposited therein, where it may be found and tested by an expert sent to report on it by intending investors. This has been, and is, a favorite method of swindling, since the expert is deceived as well as his employers, and his favorable report on the mine is made in perfectly good faith. Morton Webber, who contributes to *The Mining and Scientific Press* (San Francisco) an article on "The Detection of Salting," tells us that the fraud may be practised in at least seven ways. These methods are undoubtedly known to all mine-swindlers, and they are described here for the protection of their victims. The methods include preparation of the mine-faces before the arrival of the examining engineer, the introduction of the "salt" into the sample during the cutting, injecting "salt" in the form of solution into the sample-sacks, secretly dropping "salt" in the sample during crushing, mixing, or reduction to pulp, rubbing "salt" on the bucking-board and crusher-jaws after the examining force has gone to bed (only applicable in gold and silver examinations), introducing "salt" into the flux, where assaying is done at the mine, and the submission of fraudulent assays. Mr. Webber writes:

"Nearly all the old methods of detection fail to afford sufficient security. For example: many engineers employ a 'dummy.' Crusht samples of rock containing no ore are secretly conveyed to the workings by the examining force. The intention is to allow the dummy to pass into circulation with the other samples. If the samples are being salted, the dummy will get salted and expose the scheme. Like the sealing of the sample-sacks, the introduction of a dummy does not insure absolute protection. In the preparation of faces prior to the arrival of the examining engineer the successful drifting through of the dummy without being salted would give the examining engineer a fictitious feeling of security totally unwarranted. It would also fail to expose salting during the cutting of the samples as described.

"The dummy, however, is used by me as part of my combination means of protection because it will detect salting if attempted by [some] methods."

Mr. Webber's method of detecting salting is to employ what he calls a "key series" of samples, which he does as follows:

"Before commencing sampling I first endeavor to acquire a thorough grasp of the mine under examination. This is necessary to sample the mine intelligently. Then I proceed personally to whitewash the strips to be sampled. This part of the examination is always done by myself. The subsequent cutting of the samples and their reduction to duplicate pulps are mechanical, requiring only well-trained subordinates.

"After the sampling is completed, I resample a series. From ten to perhaps thirty channels are recut, depending on the scale of the examination. The rechanneling of several cuts is not an uncommon practise with engineers; but I depend on the improvement of a key series. For example, after the sampling is completed, or nearly so, but prior to the platting of the samples, I go through the workings and remove the tags of a number of cuts, substituting new numbers. I then give a note of the new numbers to an assistant and have them recut. The key giving the duplicate numbers, each to each, is not allowed to leave my possession. It is in keeping this information strictly to myself that I depend on detecting salting. In my judgment this is an effective method, because its simplicity does not require me to take even my chief assistant into my confidence. The penalty for being salted on an examination involving a large sum of money is so great that the engineer is entitled to take this precaution. Not only will this key series detect salting, but it will also disclose the efficiency of the sampling. It will expose faulty channeling, incompetent mixing and cutting down, or inaccurate assaying. . . . . . .

"It may be argued that a careful salter would take care to inject a uniform quantity of salt, so that the recut sample would contain the same proportion of salt as the original. It was the recognition of this danger that made me devise the key series. Safety lies in the fact that it is almost impossible to go over a channel a second time and cut the same weight of sample. . . . To salt successfully a key series, it would, therefore, be necessary to know the weight of the original sample and put a proportional quantity of salt into the original and the duplicate, depending on weight. By tagging the sample-cuts indiscriminately and retaining the vital key on the person of the examining engineer it is impossible for the salter to obtain this information."

Generally speaking, Mr. Webber says, the place to suspect salting is in workings vital to the consideration of the future life of the mine. One of the most desirable mines to salt is a gold- or silver-mine with

Poland Water
FOR HEALTH
The Perfect Table Water

For over half a century
America's Leading Natural
Mineral Water

Prescribed for sixty
years by
eminent physicians
throughout the world.

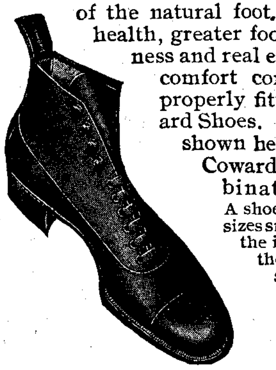
For Sale by Local Dealers.

HIRAM RICKER & SONS, Inc.
South Poland, Maine
Boston New York Phila.

SPRAGUE, WARNER & CO.
Chicago Distributors

Send for historical booklet, mentioning Literary Digest.

FOR MEN WHO THINK AND ACT
"The Affirmative Intellect," by Chas. Ferguson.
Funk & Wagnalls Company, Publishers, New York



The Coward Shoe
REG. U. S. PAT. OFF.

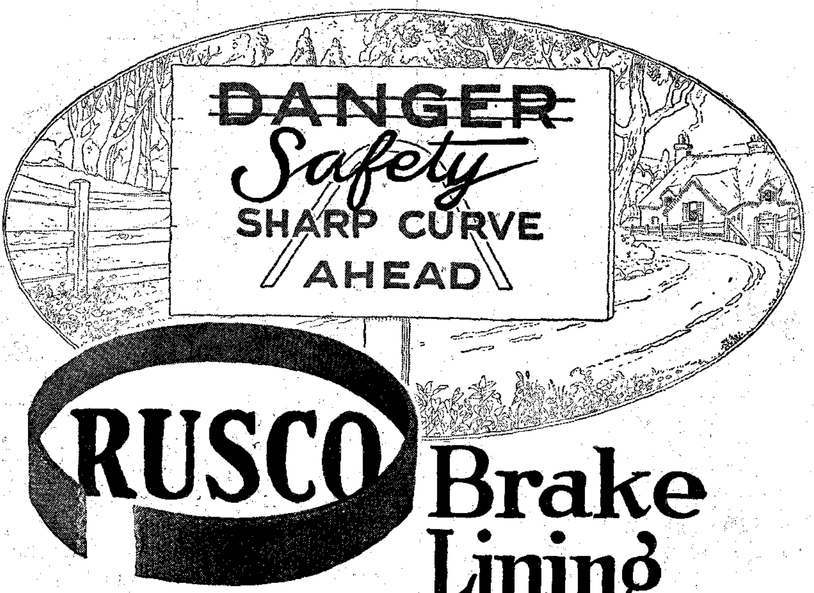
Natural Shoes Bring
Better Health

Every day more and more people are insisting on shoes that follow natural lines. For 50 years Coward Shoes have been built on this idea—that the shoe should follow the lines of the natural foot. Better health, greater foot usefulness and real every-day comfort come with properly fitted Coward Shoes. The shoe shown here is the Coward "Combination." A shoe made two sizes smaller over the instep than the regular size upper.

For further description Address Dept. F.

James S. Coward
262-274 Greenwich Street, N. Y.
(Near Warren Street)
Sold Nowhere Else

Between You and Danger



Brake Lining
and Clutch Facings

DANGER points in road driving have no terrors for the motorist whose brakes are lined with Rusco. He knows that whatever the crisis, his brakes have the power to stop the car in time. This durable, heat-resisting lining is made of the finest long fibre asbestos interwoven with brass wire. Its high quality is your protection.

Guaranteed For One Year

THE RUSSELL MANUFACTURING CO.
Established 1830
Home Office and Factories
513 Russell Avenue - Middletown, Connecticut
New York, 349 Broadway
Chicago, 1438 Michigan Ave.
Atlanta, 60 S.°Forsyth Street
Detroit, 18 Alexandrine Ave., E.

Western Distributors, JOHN T. ROWNTREE, Inc., Los Angeles, Cal.
San Francisco, Cal. Seattle, Wash. Salt Lake City, Utah Denver, Col.
South Western Distributors, CAMPBELL, WOOD & CO., Dallas, Texas

38 Factory Buildings AUTOMOTIVE EQUIPMENT ASSN. 25,000 Shuttles

SCIENCE AND INVENTION
Continued

some actual ore developed. . . . Assuming that the mine had not been salted, a large initial payment would be justifiable. He describes an attempt made to foist such a property on one of his clients, where the key series disclosed the fraud. He writes:

> "While the standing ore in the mine assayed as claimed, a winze from the lowest level and also the horizontal extremities of the lowest level had run out of ore. This combined evidence indicated the superficial nature of the deposit. The owner had endeavored to convert these openings into exposures of high-grade ore. He inferred, correctly, that if his scheme succeeded, he would swing the valuing evidence just as far in favor of the mine as the truth was against it. It transpired subsequently that the owner had injected filings from the gold and silver coinage of the U. S. A. into the cracks and crevices of these vital extremities by means of a shotgun.
>
> "The use of the shotgun is difficult to detect, except by the key series, for sampling additional faces would only mean additional salting. All the usual methods employed to protect . . . would be nugatory, because the sample is salted at the fountain-head. This method will shoot salt into the cracks and crevices. In the actual case cited, both the recut and the original were salted. The key series, however, exposed the fraud by indicating a wide discrepancy between the average or originals and recuts. . . . . . .
>
> "The use of the shotgun is probably the method of salting most difficult to detect. To salt a mine by this method is, however, most expensive, and herein is the value of having an ore-reserve that will stand sampling unaided."

NATURE AND HER IMITATORS

WHY are Nature's imitators more applauded than Nature herself? Robert C. Miller, who contributes to *The Guide to Nature* (Sound Beach, Conn.) an article entitled "Our Taste for the Artificial," thinks that it is time for us all to bestir ourselves and begin to cultivate the natural and the real. Artificiality has become a habit with us, and altho it tires us, we do not realize that relief will come from a return to nature. We must know the outdoors—not in a motor-launch nor in an automobile, but by tramping, climbing, and scrambling. Contact with the realities of life is the cure for the fatigue brought on by their imitations. Mr. Miller begins by rehearsing Æsop's tale of the actor who could squeal like a pig. He writes:

> "It seems that audiences in those days had a failing for this sort of vocal accomplishment, and the squeal artist went on the stage or the lyceum platform, or joined the circus or something, and immediately attained great popularity. There chanced one day to hear him a citizen of a philosophical turn of mind who, desiring to test certain phases of social psychology, announced that he, too, could squeal like a

pig, and desired to compete with the professional performer in the porcine art. A public competition between the two was accordingly arranged, the audience to act as judges.

"Now, before going on the stage the philosophical citizen provided himself with a real pig and concealed it beneath his toga, and at the hour of trial he gave the animal a pinch sharp enough to induce it to protest in an agonized squeal. Then the professional performer stept up and gave his squeal. Whereupon the audience applauded him roundly, announced him to be the winner, and hooted the man who had furnished the genuine pig-squeal off the stage.

"Now, we would not recommend this as a masterpiece of the short story. The title is not to our liking, the subject-matter is in rather doubtful taste, the treatment is not realistic, and there are several elements of questionable plausibility in the plot. But the tale is worth reading none the less, for a certain characteristic of human nature which it keenly and cleverly depicts—a preference for the manufactured article rather than the real, a taste for the artificial.

"A few years ago I went to hear a celebrated 'bird-violinist' of whom I had heard a great deal. I had long been interested in both birds and violins, and I found the performance quite interesting. The artist imitated on the delicate strings of his instrument the notes of a goldfinch, and it sounded like a goldfinch. He mimicked a mocking-bird, and we recognized it as a mocking-bird. He imitated a wood-thrush and brought forth from his violin the beautiful double and treble notes of that exquisite songster. Of course, there was a difference, but the similarity was strikingly apparent.

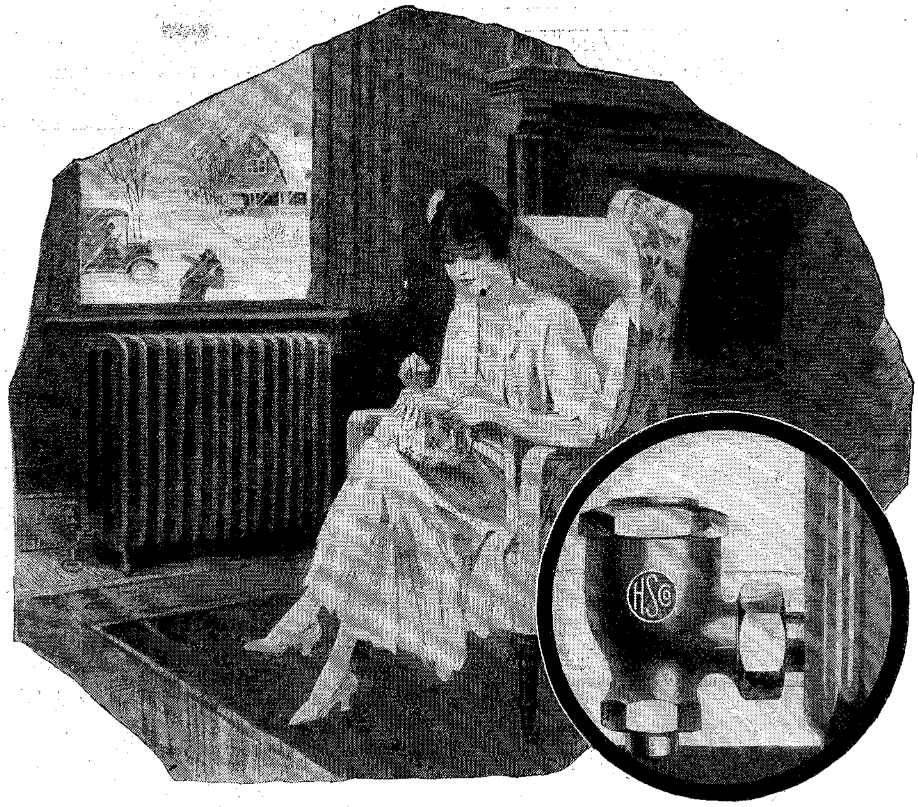
"I went home marveling at the skill of the violinist, and wondering why a thousand people would flock to a stuffy room to hear a 'bird-violinist' when they would not walk around the square to listen to a bird. The majority of mankind prefer the opera-house to the orchard and woodland. It is our taste for the artificial.

"Last summer, in passing a Chautauqua tent one evening, I noticed a crowd gathered outside gazing up into the sky. They were looking at some tiny points of light which seemed to be moving. 'Airplane lights,' some one was kind enough to inform me. There was an Air-Service Flying School in the vicinity, and rumors were abroad that experiments in night-flying were being tried. The general conception seemed to be that an airplane carried a head-light like a street-car or locomotive, that might be seen from afar. 'Airplane lights.'

"Then somebody noticed that it was not the points of light which were moving, but that clouds were moving in the opposite direction, creating an almost perfect optical illusion. 'Why, they're only stars!' several said, and the crowd ceased gazing and went inside the tent.

"Only stars. Only a few distant suns, a few thousand times as large as our own and a few million times as hot, floating a few billions of miles away in space. Only stars! *Only* stars! How disappointed!

"I went on my way, wondering why people would stand agape and strain their necks to gaze at 'airplane lights' and find the stars not worth looking at. Are the works of God less wonderful than



A Watchman to guard your comfort on ice-cold mornings

On wintry mornings how all of us appreciate a steamfull red hot radiator—silently, yet efficiently giving us its heat.

But how often do we really have such heat? More often we come down to breakfast to find ice-cold or only half hot radiators leaking water or hissing steam.

If you are experiencing such misery—if time and time again, with safety valve blowing and drafts wide open you are burning up coal and still no heat—don't blame the radiator.

You need proper air valves—the little nickel watchman that coaxes or bullies each radiator into red hot action.

HOFFMAN VALVES
more heat from less coal

They remove steam heat dissatisfaction and reduce its cost by permitting each radiator to function properly. Ask your Architect or Heating Contractor.

Hoffman Equipped Radiators never waste coal, because the Hoffman Valve permits the steam to get there and stay there.

Hoffman Equipped Radiators never need adjusting. No fiddling or fussing—but automatic perfection.

Hoffman Equipped Radiators are silent. Air binding or water hammer with consequent rumbling and banging cannot happen with Hoffmans.

Hoffman Equipped Radiators never leak scalding water or hiss live steam. You never need a pan under a Hoffman Valve.

The No. 8 Hoffman Return Line Valve (As shown on the right) is for vapor, vapor vacuum, modulating or vacuum systems.

The No. 1 Siphon Hoffman Valve is for use in single pipe systems. If yours is that kind, send for one valve—it costs $1.90 parcel post, prepaid. Try it on one radiator. Your heating contractor can then Hoffman-equip your entire home.

Send to our New York Office for our booklet "More Heat from Less Coal." In a non-technical way it gives all the details of steam heat troubles—their causes and remedies.

Hoffman Specialty Company, Inc.
512 Fifth Ave., New York
Los Angeles 215 W. Seventh Street **Chicago 130 N. Wells Street**

those of man? Are airplanes really more interesting than stars? Or is it not more our taste for the artificial?

"It is time for us, I think, to bestir ourselves and begin to cultivate the natural and the real. Humanity in 540 B.C., when Æsop wrote, was not radically different from humanity to-day. Still we prefer the artificial. We had rather hear the man squeal than the pig. Artificiality has become with us a habit. We live artificial lives, and think artificial thoughts, and carry on artificial conversations, and indulge as well in artificial amusements and recreations. . . . . . .

"The worst feature, it seems to me, of this our artificial life is its emptiness. How speedily do we grow tired of it all and become cynical and pessimistic. Our fathers wrestled with the wilderness for the bare necessities of life and were happy, and to them life was rich and deep and full of meaning. We, their children, have the luxuries, and with them the *ennui.*

"It is from nature we have come, and to nature we must go. Prodigal children, we have wandered away and spent our inheritance in riotous living, and the farther we rove the worse does our estate become and the longer and harder the return journey. But the return may yet be made, and ours is the privilege of making it.

"Let us not be false in our dealings, and seek to return to nature bearing all our artificialities with us. The journey may not be made in a motor-launch or an automobile. Before we would know the outdoors we must forsake these—grow too primitive for them, or too civilized, I know not which. We must tramp and climb and scramble, and be wet with rain and dew, and scorched by the sun, and often footsore and weary. Then we shall know the joy that comes from wrestling with life and the quietness of spirit that comes from much association with nature, and the rest that waits on exhaustion. We shall find in what the realities of life consist, and incidentally we shall lose our taste for the artificial."

THE BIGGEST FLOATING DRY DOCK

THE record in size for floating dry docks is now held by the one owned by the Morse Company, of Brooklyn, N. Y., and in use by them since September last. This monster floating dock is described and illustrated in *The Pacific Marine Review* (San Francisco). Among other interesting things about it, we learn that it is built in five sections, weighs 30,000 tons, accommodates vessels 720 feet long, and required in its construction special elevated railways, a blow-pipe system to remove dust and shavings from the different machines used, and the invention of a new kind of cut-out saw that will cut at any desired angle. The various sections were built and launched separately at intervals of several weeks. Says the writer of the article in the magazine named above:

"On September 26 the company put into operation in its Brooklyn yard five sections of its new 30,000-ton floating dry dock, the largest of its kind in the world.

"Three sections of this dock could raise a vessel of 15,000 tons net and of 475 feet in length. The fourth and fifth sections have increased the capacity in proportion. With the sixth and last section in use the dock can accommodate vessels of 720 feet in length and of more than 30,000 tons.

"The immensity of the task of constructing a new dry dock of this size can better be appreciated when it is understood that each section or portion required considerably over one million feet of timber. Every seam had to be calked with special care so that the pontoon is made absolutely water-tight.

"The large motor-driven pumps operating the dock are of special design to raise or lower the dock in record time. Thus it is seen that the building of a 30,000-ton floating dry dock is a task not to be compared with the building of a ship. It involves infinitely more preparation, study, and thought before the actual work of construction begins.

"For six years Mr. Edward P. Morse, Sr., head of the Morse Company, labored with his assistants over the task of designing a floating dry dock that would be superior to anything in use. The task further necessitated the erection and equipment of buildings suitable for the construction of the enormous pontoons.

"When the final plans were approved, water-front property, at the foot of Sixty-third Street in Brooklyn, was acquired and graded, and to George MacLaurin, carpenter superintendent, was assigned the work of building the plant and erecting the dock sections.

"In connection with his task, Mr. MacLaurin conceived and perfected a cut-out saw capable of cutting at any angle required, and for which there was urgent need; and again, when the Government wanted the property facing the new dry-dock yard, he vacated, permitting the Government minimum loss of time, while at the same time he continued to rush construction-work on the new dock."

Foundations for the sections were made by driving piles. Stringers were laid and covered by four-inch planking and heavy launch ways were built. On each side of these an elevated-railway was erected and two heavy electric traveling cranes were installed, each with a boom of sufficient length to handle timber from the center of the property to the center of the section while building. The elevated rail structure was extended into the bay to facilitate the unloading of timber, and the traveling derricks unloaded barges and distributed lumber with remarkable efficiency. We read further:

"An incinerator was built for the burning of débris in the yard and a very complete blow-pipe system was installed to carry shavings and dust from the different machines. A large electrically operated air-compressor was installed to furnish motive power for the necessary boring and driving machinery. Stationary derricks, one to feed the different saws, were also part of the equipment.

"As concerns its method of operation, the new dry dock is a duplicate of the old dry dock which was the first electrically equipped dock in the world, the first on which centrifugal pumps were used, the first on which alternating current induction-motors were used, and also the first to be equipped with an auxiliary draining system. In many respects the old dry dock has been the most successful and efficient dry dock in this country.

"The launching of the huge sections of the new dry dock were events of more than passing notice. A channel of sufficient depth was dredged in the main yard of the Morse Company preparatory to the floating of the big sections. These sections were slipt from the ways at intervals of several weeks.

"As the sections are uniform in size, save the first and sixth, on which there are large aprons, a description of the launching of the fifth section, with its million feet of timber attached, together with 210 tons of galvanized iron bolts, is typical of all, excepting, of course, the weather conditions.

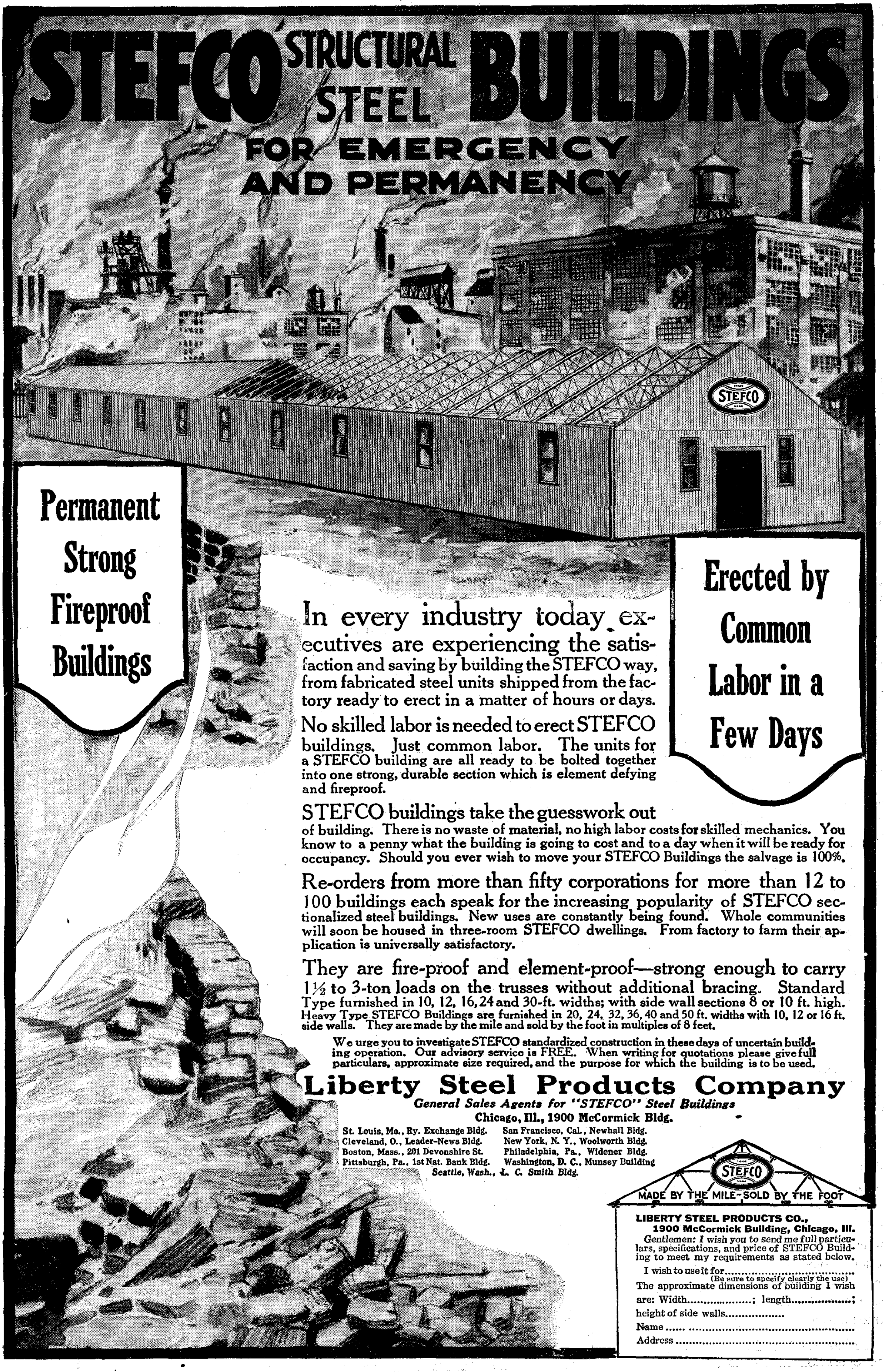
"Exactly sixty-four days after the first timber was laid the fifth section was floated. Without a hitch, the big mass of timber, clumsy tho it seemed, slid off the well-greased ways into the water of New York Harbor. Tugs of the Morse towing fleet swarmed about it, and at a given word cables running from the section to the tugs became taut. Instantly the great section moved, churning the water in its path.

"Later it was attached to other sections in operation in the Morse Company's Brooklyn yard."

THE MENACE OF THE RAT

THE number of diseases for which the rat is or may be responsible increases with investigation. A few new ones are described in an article on "The Rodent Menace," quoted from *The Lancet* (London) by *The Scientific American Supplement* (New York). We ought all to be "swatting" rats as well as flies. Summer campaigns and "rat-weeks" have already reduced the number of the enemy in England, and we should not be slow to follow in her footsteps. Civilization, says the writer of the *Lancet* article, is daily teaching us that we are members one of another, and this applies especially to our diseases, for one carries the germ and another catches it. On the animal kingdom we are still more intimately dependent, for they frequently act as hosts to our infections during inhospitable intervals. He goes on:

"What should we know of malaria if it was not for the mediation of the mosquito, or of plague if it was not for the rat? And the rat is becoming ever more and more suspect. . . . In England the presence of the specific spirochæte of hæmorrhagic jaundice in the rat was not fully proved until the investigation of Major A. G. R. Foulerton, carried out in the Hygiene Department of University College, London. . . . Major Foulerton examined 101 rats caught within the city and metropolitan area, and in four of them found a spirochæte which killed a guinea-pig on the twelfth day with all the characteristic appearances of spirochætal jaundice. Three of these rats were from a batch of twelve caught at a general store in the city last November; the fourth from a batch of seven from another part of London. . . . Major Foulerton discusses the method of transmission of the protozoon from rat to rat and rat to man, inclining in the first case to accidental inoculation, in the latter



STEFCO STRUCTURAL STEEL BUILDINGS

FOR EMERGENCY AND PERMANENCY

Permanent Strong Fireproof Buildings

Erected by Common Labor in a Few Days

In every industry today executives are experiencing the satisfaction and saving by building the STEFCO way, from fabricated steel units shipped from the factory ready to erect in a matter of hours or days.

No skilled labor is needed to erect STEFCO buildings. Just common labor. The units for a STEFCO building are all ready to be bolted together into one strong, durable section which is element defying and fireproof.

STEFCO buildings take the guesswork out of building. There is no waste of material, no high labor costs for skilled mechanics. You know to a penny what the building is going to cost and to a day when it will be ready for occupancy. Should you ever wish to move your STEFCO Buildings the salvage is 100%.

Re-orders from more than fifty corporations for more than 12 to 100 buildings each speak for the increasing popularity of STEFCO sectionalized steel buildings. New uses are constantly being found. Whole communities will soon be housed in three-room STEFCO dwellings. From factory to farm their application is universally satisfactory.

They are fire-proof and element-proof—strong enough to carry 1½ to 3-ton loads on the trusses without additional bracing. Standard Type furnished in 10, 12, 16, 24 and 30-ft. widths; with side wall sections 8 or 10 ft. high. Heavy Type STEFCO Buildings are furnished in 20, 24, 32, 36, 40 and 50 ft. widths with 10, 12 or 16 ft. side walls. They are made by the mile and sold by the foot in multiples of 8 feet.

We urge you to investigate STEFCO standardized construction in these days of uncertain building operation. Our advisory service is FREE. When writing for quotations please give full particulars, approximate size required, and the purpose for which the building is to be used.

Liberty Steel Products Company

General Sales Agents for "STEFCO" Steel Buildings

Chicago, Ill., 1900 McCormick Bldg.

St. Louis, Mo., Ry. Exchange Bldg.
Cleveland, O., Leader-News Bldg.
Boston, Mass., 201 Devonshire St.
Pittsburgh, Pa., 1st Nat. Bank Bldg.
San Francisco, Cal., Newhall Bldg.
New York, N. Y., Woolworth Bldg.
Philadelphia, Pa., Widener Bldg.
Washington, D. C., Munsey Building
Seattle, Wash., L. C. Smith Bldg.

STEFCO

MADE BY THE MILE–SOLD BY THE FOOT

LIBERTY STEEL PRODUCTS CO.,
1900 McCormick Building, Chicago, Ill.

Gentlemen: I wish you to send me full particulars, specifications, and price of STEFCO Building to meet my requirements as stated below.

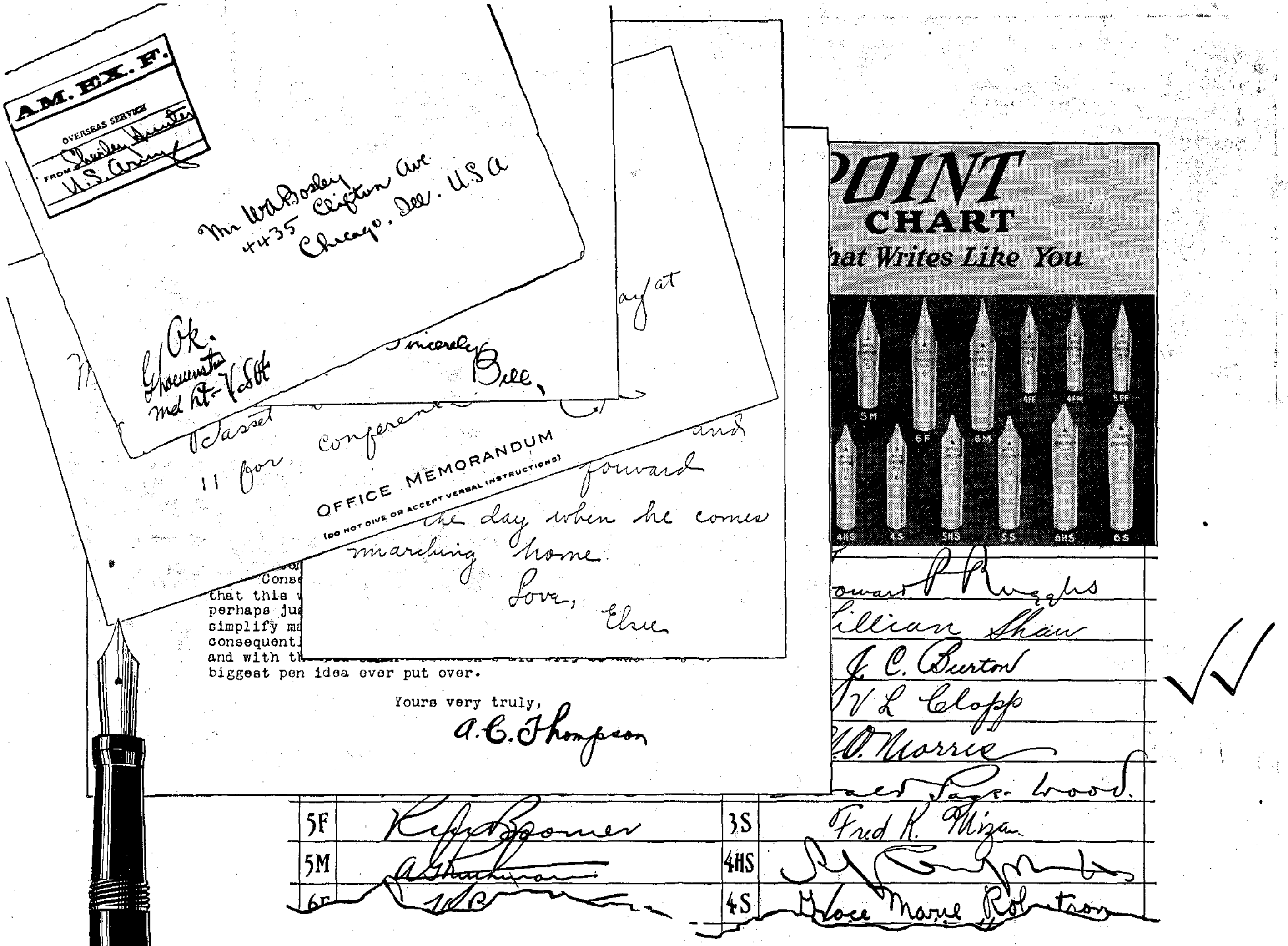
I wish to use it for..............................
(Be sure to specify clearly the use)

The approximate dimensions of building I wish are: Width.....................; length..................;

height of side walls..................

Name ....

Address ....



forward the day when he comes marching home.
Love,

that this
perhaps ju
simplify m
consequent
and with t
biggest pen idea ever put over.

Yours very truly,
A. C. Thompson

However You Write

There's a Tempoint that Writes Like You—Try It for Ten Days

The fountain pen is now more than a mere writing implement. Under the Tempoint system of charting handwriting, your fountain pen becomes a truly right-hand friend, because the handwriting chart enables you to select the very Tempoint that writes like you. No guessing. No-rule-of-thumb selection.

And, what is more, you can try your Tempoint for ten days before deciding to keep it. If at the end of ten days you are not as completely satisfied as you were at the time of purchase, return the Tempoint to the dealer and he has our full authority to refund your money.

Throughout the years of Tempoint service, you will appreciate more and more Tempoint's ten superb mechanical features, notably the hand-hammered gold pen with its steel-like flexibility and durability—unaffected by harsh ink acids or hand-writing—a point that will never become "sprung."

Go to your nearest Tempoint dealer today. Select your Tempoint the chart way. Try it for ten days. The Tempoint must *continue* to make good, or, no sale. A fountain pen *must* be good to stand such a test. The Tempoint is made in both Self-Filling and Screw-Joint styles—$2.50 up.

Interesting Book Free

This book, written by C. L. Ricketts, the well-known handwriting authority, is called "Why No Two People Write Alike." It is also a brief history of the development of writing, from the stone-writing age to today. It also pictures and describes the Tempoint Chart, and the ten features that make the Tempoint the right-hand mate to the famous Eversharp Pencil. Write for it today.

THE WAHL COMPANY, 1800 Roscoe Street, Chicago, Ill., U. S. A.

EASTERN OFFICE: Astor Trust Building, 501 5th Ave., New York
BERT M. MORRIS COMPANY, 444 Market Street, San Francisco, Cal.
Western Representatives for Eversharp Pencils and Tempoint Fountain Pens.
CANADIAN REPRESENTATIVES: Rowland & Campbell, Ltd., Winnipeg, Manitoba

DEALERS: Write for Tempoint catalog and interesting data on this new idea of selling by the handwriting chart

TEMPOINT

THE PEN WITH THE TEMPERED POINT
Right-Hand Mate to the famous Eversharp Pencil

SCIENCE AND INVENTION
Continued

to the infection of food and drinking-water. For the present the rat-flea has nothing to say to this matter.

"In a presidential address, delivered last year before the Royal Society of New South Wales and since reprinted and circulated, Dr. J. Burton Cleland pointed out that a town that lets its rats multiply is exposed to a menace that may lead to enormous financial losses and possibly a heavy death-roll. Rats live a communal life in direct contact with one another, and thus the passage of any pathogenic [disease-producing] organism is facilitated, while in the passage the pathogenicity of the less lethal forms is probably increased. He went on to discuss rat leprosy, which is widely distributed, tho of relatively rare occurrence, its incidence among the rat population in New South Wales being much about the same as the incidence of leprosy among the human population. From investigations on its occurrence in rats it might be inferred that there is one diseased rat in Sydney for every 100,000 examined, while in New South Wales there is approximately one leper to every 80,000 of the population.

The question arises as to whether there is any possible connection between the two diseases, whether, indeed, they are not due to the same organism. Dr. Cleland sketches the history of the tubercle bacillus, showing that it was originally a saprophyte [fungus] as, for instance, the timothy-grass bacillus is still; the next stage being its accidental introduction by the alimentary canal or through wounds into the tissues of vertebrates, where it has found itself capable of living and multiplying, even tho in such an unusual environment; finally, being given frequent opportunities of escape from its host through ulceration of the lungs and of introduction consequently to fresh individuals, its pathogenicity has been increased and its saprophytic qualities have been diminished or lost. The rat-leprosy bacillus may, he suggests, be in somewhat the same transition stage.

"These are new aspects of the rodent menace about which sufficient is known to demand the more active measures of suppression in this country. The Rats Orders of 1918 and 1919 gave local authorities the liberty to organize local campaigns. Several county councils [in Britain] have appointed official rat-catchers. In Leicestershire a summer campaign resulted in the death of 125,223 rats, for which a sum of £1,525 was paid out. The Board of Agriculture has, in harmony with a growing habit, suggested a 'rat-week' for October 20–27, in which village communities should compete one against the other in baiting, trapping, and ferreting. All this is to the good, but we doubt the attainment of the end in view so long as slack authorities are not gently urged by legislative action; for rats harried on one side of a community can take refuge on the other side where the human community is more lenient."

Financial Tip.—Another kindly adviser says: "Learn the value of a dollar." Nothing is easier than that. All you have to do is to go out, taking a dollar with you, and try to buy something.—*New York Telegraph.*

Visible proof that it's Water-proof!
PITCAIRN WATER SPAR
PITCAIRN AGED VARNISH
ONE GALLON U.S. MEASURE
WATER SPAR

SEE in your dealer's window the piano-rich varnish finish of this wood panel standing in water month after month.

Pitcairn WATER SPAR Varnish

gives a beautiful finish that can't be dimmed by water, steam or humidity.

For floors, furniture and both interior and exterior woodwork.

PITCAIRN · VARNISH · COMPANY
Milwaukee, Newark, San Francisco, Los Angeles & Seattle
EXPORT DEPARTMENT, WOOLWORTH BUILDING, NEW YORK CITY
PITTSBURGH · PLATE · GLASS · COMPANY
Distributing Stocks in all leading cities of the United States

3 IN
REGISTERED
TRADE MARK

Little Drops Do Big Things

3-in-One is the oil of performance. It does many things ordinary oils can't do. For instance—

3-in-One oils typewriters, sewing machines, talking machines, locks, hinges, clocks, dentists' tools, barbers' clippers, cash registers, magnetos, cream separators and any fine mechanisms, exactly right. It never gums nor dries out.

3-in-One polishes fine furniture and hardwood floors to perfection.

It makes the finest dustless duster and sanitary floor mop possible.

3-in-One oil

puts a razor in perfect shaving trim. Softens and livens the strop. Saves the razor—eases the shaver.

Polishes bright metal. Prevents rust and tarnish on all metal. These uses are but part. Our Dictionary tells many more uses.

Sold in drug, grocery, hardware, sporting goods and general stores: 1 oz. bottle, 15c; 3 oz., 30c; 8 oz. (½ pt.), 60c. Also in Handy Oil Cans, 3 oz., 30c. If you cannot get a can of your dealer, we will send one by parcel post, full of 3-in-One, for 30c.

Three-in-One Oil Co.
165 KAH. Broadway, New York

FREE—Write for generous free sample and 3-in-One Dictionary.

REVIEWS OF NEW BOOKS

RECENT VOLUMES ON ROOSEVELT

Thayer, William Roscoe. Theodore Roosevelt. An Intimate Biography. Boston: Houghton Mifflin Company.

The biography before us is not only a vivid sketch of the President's varied life, unencumbered by trivial details, but a carefully digested review of the political and social movements of which he was so often the spring, in their relation to the circumstances and public temper of the time, and as explaining his contemporary course. Mr. Thayer guards himself, however, against the impression that he means to be a eulogist, telling us that he was of a different political party, and occasionally antipathetic to the ideas and acts of his subject; but in every case, he declares, he never lost confidence in the uprightness of the actuating motives.

"It is because I think," he remarks on page 159, "that Roosevelt had a clear vision of the world in which he dwelt, and saw the path by which to lead and improve it, that his career has profound significance to me. Picturesque he was, and picturesqueness made whatever he did interesting. But far deeper qualities made him significant."

At any rate, Mr. Thayer has conveyed a portrait of the man and his background in a surprizingly real perspective. That, perhaps, is the most striking merit of the work.

The reader sees in equal perspective the situation in which the man stood as this and that great question came up, and his relation to the political horizon. The short chapter in which the biographer describes in a rapid sketch the world that confronted Roosevelt when he so suddenly became President by the death of Mr. McKinley is like a carving in crystal for clearness and beauty, and shows the set of the stage whereon were played those activities that excited so much interest and controversy among us. Mr. Thayer does not confine himself to a chronological account of Mr. Roosevelt's doings, especially after he became President; nor does he waste his space by details of affairs easily looked up elsewhere, but considers his subject epochally as the man, and his policies develop with the evolution of events.

Yet the book is nowhere argumentative or heavy. It has not only the elegance of style to be expected from Mr. Thayer's pen, but abounds in anecdotes and witticisms, and contains many bits of personal history or unpublished expression derived from the close friendship and large correspondence that had long existed between Mr. Roosevelt and his biographer. One of the most striking of these novelties is the answer made by Roosevelt to Mr. Thayer's question one day as to what he would have done had he been President when that advertisement appeared warning the public against sailing on the *Lusitania*. The reply was in substance:

> "I should have instantly had prepared and handed to Bernstorff his passports, and said: 'You will sail on the *Lusitania* yourself next Friday; an American guard will see you on board and prevent your coming ashore."

Abbott, Lawrence F. Impressions of Theodore Roosevelt. Illustrated. 8vo, pp. 325. New York: Doubleday, Page & Co.

Mr. Abbott, a member of the staff of *The Outlook*, had enjoyed some acquaintance with Mr. Roosevelt before as well as

REVIEWS OF NEW BOOKS
Continued

fter he became President; and it was he ho proposed the plan by which the ex-'resident agreed to become "contributing ditor" of *The Outlook*, just before sailing or Africa on his hunting and collecting rip. His very first editorial raised a storm f retributive justice in Oklahoma and elsewhere. Precisely a year later Mr. Abbott, ith Mrs. and Miss Roosevelt, met the unter as he emerged from the wilderness t Khartum in the Sudan; and here begins he peculiar part of this book, biographially considered, for Abbott, taking on imself the functions of a much-needed ecretary, accompanied Mr. Roosevelt hroughout all that wonderful tour that exited such extraordinary interest in Europe. 'his part of the work is the most interestng, as narrative, for the author gives us nany entertaining incidents of the party's ojourn in Rome, Berlin, Copenhagen, 'aris, London, and elsewhere. It always net with the sort of attention given to visitng royalties, plus a public curiosity and nthusiasm no living monarch of that time ould inspire.

Much attention, with liberal citations and omments, is devoted to the doings and peeches of Mr. Roosevelt on that tour. 'he unhappy situation that prevented an udience with the Pope, in Rome, is reounted at length from original knowledge, or the correspondence was conducted hrough Mr. Abbott, and the reasons for he outcome are creditably explained. The amous Guildhall speech, in London, in vhich Roosevelt, from his own observations n Egypt, counseled England as to her duty ither to "govern or go" in that half-rebelious country, is shown here to have been y no means a rash outburst of scolding, s some called it at the time, but an act ot only carefully studied but shown in dvance to, and approved by, some of the nost influential men in Great Britain; and he nudge the speech gave to public sentinent seems to have been the direct cause of that change of policy that led to the ending of Kitchener to Egypt in 1911, and the restoration of good order and good will there.

Among other self-imposed duties of the author was that of taking charge of all money matters, and giving his chief a little pocket-money from time to time, more or less begrudgingly. When the party left Southampton on the way home he informed Roosevelt that he still had about three thousand dollars to his credit. "Good," says the President. "That will help me pay the duties on my baggage at the customhouse." He had refused the courtesy offered by the Treasury of having his trunks passed free at New York. Altho these are the liveliest chapters in the book, they are not the larger nor the more valuable part, for Mr. Abbott is able by his intimate association with Roosevelt in the editorial work of *The Outlook*, from 1910 to 1914, and by his access to letters and papers not open to or neglected by others, to throw light on certain obscure or misunderstood acts and sayings of his subject; and this light from a new angle illuminates more and more the essential uprightness of the man in his political as well as his personal career. "So I believe," Mr. Abbott declares, "that Theodore Roosevelt's greatest contribution to his country and his time was personality"—the man himself.

It is most interesting to learn here the beginnings of several conspicuous courses

BEEMAN'S
ORIGINAL PEPSIN CHEWING GUM

Good Digestion

GOOD digestion depends largely upon two things,—the quality of food we eat, and the manner in which we eat it.

Since my original pepsin chewing gum was first introduced, through national and state legislation many laws have been enacted which assure the public a better quality food today than ever before, but the manner in which we eat food has not been materially improved.

By eating too hurriedly we fail to supply the food with saliva which is so necessary in the first processes of digestion, and of course in this hurried eating the teeth do not perform their proper function, which is to break up the food into small particles.

The use of my original pepsin chewing gum ten minutes after each meal helps to supply the moisture which was not provided at meal time, and hence tends to improve the digestion of those who eat too hurriedly at meals.

E. E. Beeman

BEEMAN'S PEPSIN CHEWING GUM
REG. U.S. PAT. OFF.
GOOD FOR DIGESTION

CHICLE
AMERICAN CHICLE COMPANY
New York Cleveland Chicago Kansas City San Francisco

Spicer

UNIVERSAL JOINTS AND PROPELLER SHAFTS

IN starting a heavy car or truck a torsional stress measured in tons is thrown upon the propeller shaft and the universal joints. No part of an automobile meets heavier service. In none is strength so vital.

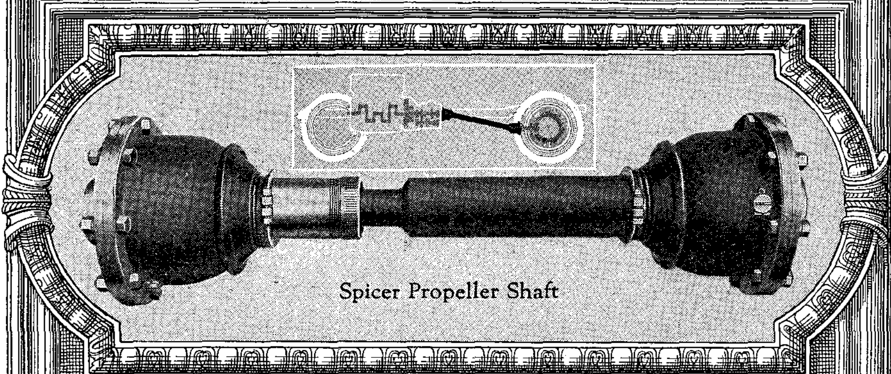
Since 1904 SPICER PROPELLER SHAFTS and SPICER UNIVERSAL JOINTS have been functioning quietly, efficiently, enduringly—outlasting the finest cars. Today they are used by over one hundred of the best known makes of automobiles and trucks.

Genuine SPICER UNIVERSAL JOINTS bear the SPICER name on the flange.

SPICER MFG. CORPORATION
SOUTH PLAINFIELD, N. J.

The Truck: Number Fourteen of a series of SPICER advertisements.

© S. M. C. 1919



Spicer Propeller Shaft

REVIEWS OF NEW BOOKS
Continued

of political action by the President, and th hitherto undescribed reasons or circumstances that brought them about. For example: The return of the Boxer indemnit to China was not due to original though by Roosevelt, but was suggested by Lyma Abbott, and carried out after the Presiden became convinced after a long intervie with the Abbotts and Dr. H. W. Smith, missionary resident in China, that it woul be a wise thing to do, as an aid to Chines education.

These "Impressions" are not only capital reading, but are a distinct and valuabl contribution to the accumulating literatur on our great ex-President. The lack of a index is almost unforgivable in such a book

Sewall, William Wingate. Bill Sewall's Stor of T. R. Illustrated. Pp. 116. New York: Harpe & Brothers.

Any interpretation of Theodore Roosevelt's life that fails to take account of hi ranch life and all its adventures comes wo fully short of the real thing. Outdoor life especially ranch life, with all that it usuall implies has reactions of a very differen nature from what one experiences whe most of his time is spent within the narro confines of an office in one of our skyscrapers. Other things being equal, th rough and tumble of outdoor life is likely t produce the qualities so conspicuously manifested in the career of Colonel Roosevelt forcibleness, directness, and manliness.

Bill Sewall knew Roosevelt when he wa eighteen years of age. He knew him as hi guide in the Maine woods; he with anothe man took charge of his Dakota ranch; the went on expeditions together, encountere adventures, shared thrilling experiences and "ate out of the same dish and slep under the same blanket." Now that thos memorable days are over this is the estimate that Sewall gives of Roosevelt:

> "I could not see a single thing tha wasn't fine in Theodore, no qualities tha I didn't like. . . . I had never seen anybody that was like him, and I have hel that opinion ever since."

After the Republican convention tha nominated Taft in 1908 he wrote Sewall letter which ended thus:

> "My ambition is, in however humble manner and however far off, to travel in the footsteps of Washington and Lincoln."

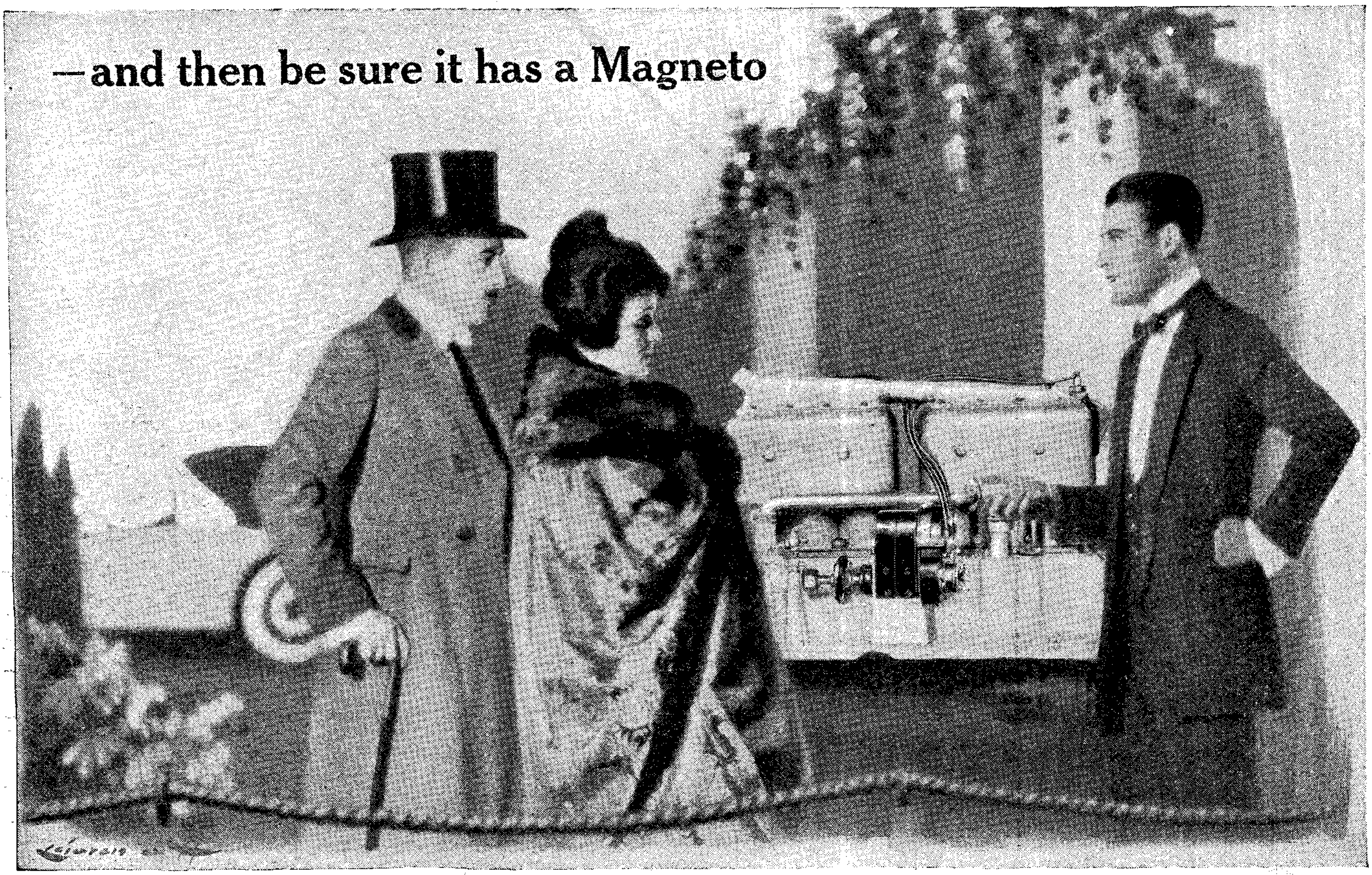
Sewall, who knew him under all conditions, believes that he did travel "in the footsteps of Washington and Lincoln," and in this judgment most people will concur.

THE THINKING OF PRIMITIVE RACES

Gilmore, George William. Animism, or Thought Currents of Primitive Peoples. Pp. xii-250. Boston: Marshall Jones Company.

Anything which helps us to understand the origin and development of society as it exists now is of great practical value. This small book describes a stage of early culture which has come to be recognized as a substratum of all civilizations. The most direct reference of the facts reported is to religion They should, in the main, be known by all those who are, or aspire to be, leaders in religion, for they give the key to the origin of the religious forms that have succeeded, and will, no doubt, continue to succeed, each other among men.

The author is well informed, and his treatment of the subject is sufficiently thorough for all but specialists. In six-


—and then be sure it has a Magneto

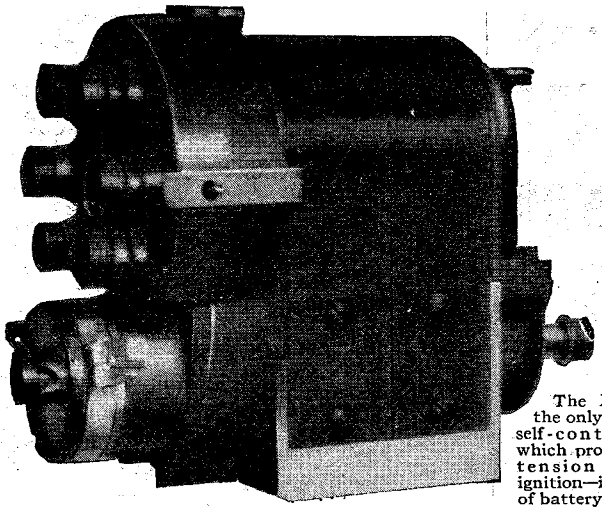
Magneto Ignition

IT'S DEPENDABLE

A Magneto—that is the accessory especially to look for when you buy a car. When you look under the hood and find that the engine has a Magneto, then you *know* it has dependable ignition—and, more than that, you can be sure the car is good thruout, for those that have Magneto Ignition are among the best built.

A Magneto is an independent source of electricity; it definitely ensures that you can start quickly even in the coldest weather—that you will get the hottest spark regularly at all speeds, from current created as you use it—that you will get increased power on the hills, more miles per gallon, quicker "get-aways", and greater flexibility of control.

If the car, or other vehicle you select, has any other type of ignition, ask to have it equipped with Magneto Ignition as *optional* equipment. The very same make of car is undoubtedly Magneto-Equipped when sold for export.



The Magneto is the only dependable self-contained unit which produces high-tension sparks for ignition—independent of battery or coil.

MAGNETO MANUFACTURERS

110 West 40th Street, New York

ERICSSON MANUFACTURING CO.
The Berling Magneto

THE SIMMS MAGNETO CO.
Simms Magnetos

AMERICAN BOSCH MAGNETO CORPORATION
The Bosch Magneto

SPLITDORF ELECTRICAL CO.
Aero and Dixie Magnetos

THE EISEMANN MAGNETO CORP.
The Eisemann Magneto

Send for this book—IT'S FREE Dig. 12-27

MAGNETO MANUFACTURERS
110 W. 40th St., New York

Please mail me your Free Booklet —"Why Magneto Ignition Makes a Good Engine Better."

Name..

Town..........................*County*...........................*State*........

Mention below make, year and model of your car, truck, tractor, etc.

The Luxeberry Painter says:

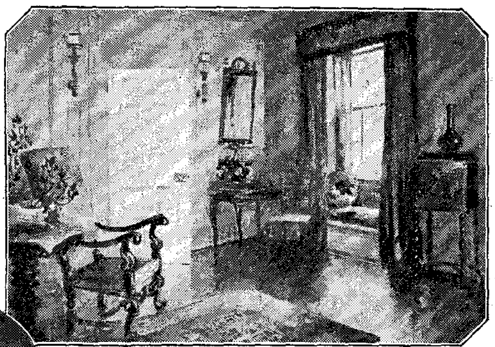
"Everywhere I go to work I get a double smile of greeting—one for myself and one for the Berry Brothers' label on the finishes I use. Seems as though everybody looked on that label as an old friend."

Generations of home-builders and home-lovers know Berry Brothers' scientific finishes.

Ask your dealer about Liquid Granite Floor Varnish, Luxeberry White Enamel, Luxeberry Wood Finish, Luxeberry Wall Finishes, Luxeberry Spar Varnish and Berrycraft.

Write us for a free copy of our book "Beautiful Homes," handsomely illustrated in color

BERRY BROTHERS INC
World's Largest Makers
Varnishes and Paint Specialties
Detroit, Michigan (48) Walkerville, Ontario



REVIEWS OF NEW BOOKS
Continued

teen brief chapters that which is known or conjectured about the origin of the beliefs in human and other souls and in spirits, about the nature of these souls and spirits and their relation to the bodies which they animate and to other bodies and souls, are set forth and abundantly illustrated.

Among the many important generalizations which take form as one reads this book—or any other covering acceptably the same topics—two arrest the attention with especial force: (1) The naturalness of early beliefs in souls, spirits, and gods; and the unavoidableness of worship among people endowed with the mental capacities belonging to man. (2) The antagonism to social improvement of any belief that regards any great human institution—a particular religion, for instance—as unchangeable and necessarily permanent.

The kind of knowledge contained in this book generates the larger faith: the faith that sees forward because it knows the past.

BROOKS ADAMS'S BOOK OF THIRTY YEARS AGO

Adams, Brooks. The Emancipation of Massachusetts—The Dream and the Reality. Revised and enlarged edition. 8vo, pp. vi-534. Boston: Houghton Mifflin Company.

The copyright dates on this volume are 1887, 1915, 1919. The contents are title-page, prefatory note to first edition, table of contents, "preface to new edition" (covering 168 pages), and 366 pages of text. Apparently the latter is left as it was first penned. What constitutes the revision and newness appears to be the new preface. In that the author affirms the correctness of the text as history, but declares that he has reversed his philosophy. In the text he set forth implicitly a Darwinian, progressive evolution. Thirty years after he suspects—

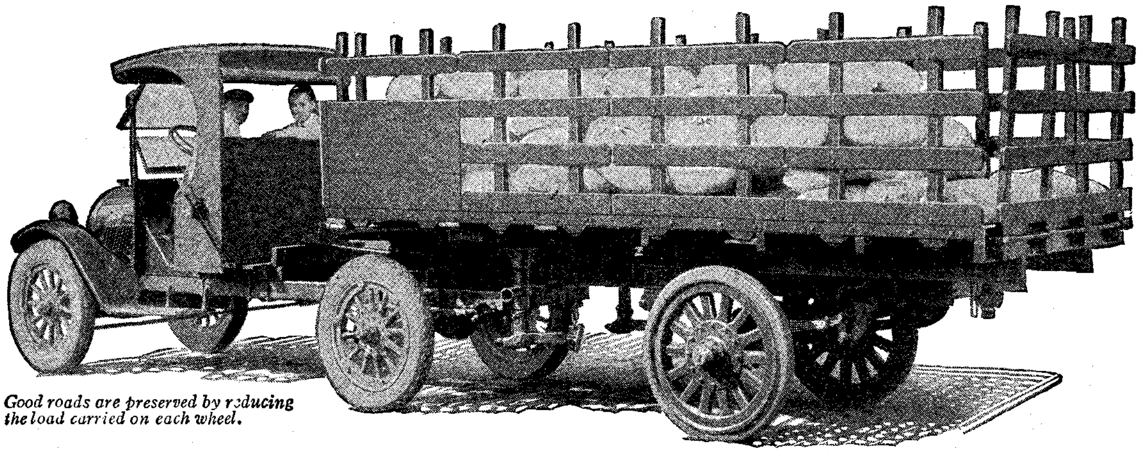
"that the universe, far from being an expression of law originating in a single primary cause, is a chaos which admits of reaching no equilibrium, and with which man is doomed eternally and hopelessly to contend."

The thesis in the text we understand to be that while the "priest" made the "first step from barbarism," he also made of himself the "sacred caste," became reactionary, stifled free inquiry, used schools to maintain unreasoning prejudice or serve his own selfish ends, and in general blocked advance. The fiercest battle of mankind has been to break down the sacerdotal barrier and to liberate the mind. Particularly the author aims to exhibit the part Massachusetts played in "that tremendous drama."

"In the tempest of the Reformation a handful of the sternest rebels were cast upon the bleak New England coast, and the fervor of that devotion which led them into the wilderness inspired them with the dream of reproducing the institutions of God's chosen people, a picture of which they believed was divinely preserved for their guidance in the Bible. What they did in reality was to surrender their new commonwealth to their priests. Yet they were a race in whose bone and blood the spirit of free thought was bred: the impulse which had goaded them to reject the Roman dogmas was quick within them still, and revolt against the ecclesiastical yoke was certain. The clergy upon their side trod their appointed path with the precision of machines, and, constrained by inexorable destiny, they took that position of antagonism to liberal thought which has become

Trailmobile

Trade-Mark Reg. U. S. Patent Office



Good roads are preserved by reducing the load carried on each wheel.

Better Hauling for the Cities

Doubled Truck Capacity and Elimination of Delay in Loading

THOSE are the big advantages that make the Semi-Trailmobile and short wheel-base truck the most efficient of all equipment for hauling in the cities. Twice the rated capacity of the truck unit is easily hauled without incurring any of the penalties of overloading, and at an increase in the cost of only about 12½ per cent.

The load is put on the Semi-Trailmobile while the truck is away with another load. Uninterrupted employment of both driver and power plant is possible.

The Semi-Trailmobile is especially adapted to this kind of hauling by the exclusive fifth wheel coupling mechanism, which enables the driver to couple up and uncouple from the seat, without requiring the assistance of a helper.

This equipment has a shorter turning radius than any other that will carry an equal load. It is therefore much easier to manipulate about loading platforms, piles of materials, and everywhere space is limited. Backing up and going forward, cramping wheels this way and that, is seldom necessary.

As the truck used to pull the load on the Semi-Trailmobile is only half as large as the truck which would be required to carry the load, it is much easier for the driver to handle—lighter gears to shift, a lighter clutch to control. Drivers are enthusiastic over the Semi-Trailmobile hauling method.

This modern system cuts both equipment and operating costs deeply. It makes the labor shortage less acute. It is more conveniently handled under city conditions.

Those great corporations everywhere which have vast amounts of hauling to do over the streets are rapidly standardizing on semi-trailer hauling. You should get all the facts at once. *Write for literature.*

The Trailmobile Co.
517-537 E. Fifth St. Cincinnati, O.

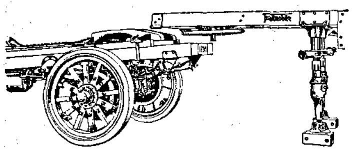
The Motorless Motor Truck

Thousands in Use

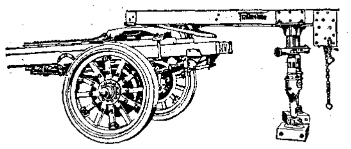
DIVISION No. 1
Light four-wheeled Trailmobiles for use with passenger cars or light trucks: 1,250 lbs., ¾-ton and 1 ton.

DIVISION No. 2
Heavy duty four-wheeled Trailmobiles for use with trucks: 1½-tons, non-reversible; 2 tons; 3½ tons, and 5 tons, reversible and non-reversible.

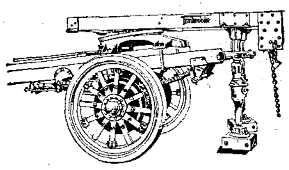
DIVISION No. 3
Semi-Trailmobiles: 2½-tons; 4 tons; 6 tons and 10 tons.



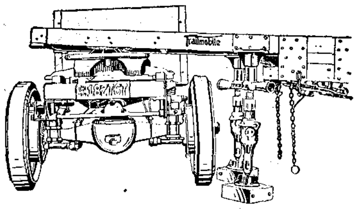
This shows the coupling mechanism of the Semi-Trailmobile fifth wheel and the props or jacks which support the Semi-Trailmobile when it is detached from the truck, as they appear just as the truck is about to back in to make the coupling.



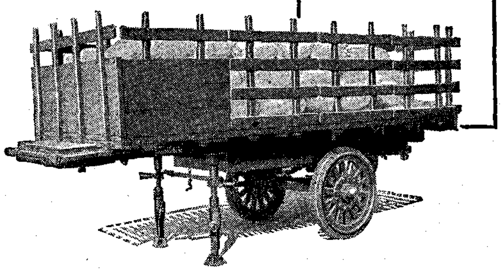
This shows what happens as the truck backs in. It shows how the front end of the Semi-Trailmobile is lifted automatically, making it unnecessary to raise the Semi-Trailmobile with jacks before coupling takes place.



This shows the coupling mechanism after the coupling has been completed. Note how far the jacks or props have been lifted from the ground. The chain running forward from the fifth wheel controls the latch and makes it possible for the driver to release the coupling without leaving his seat.



This shows how the truck is able to back in and couple up to the Semi-Trailmobile at an angle.



This shows the Semi-Trailmobile detached from the truck for loading or unloading. One truck may work with as many as three Semi-Trailmobiles when hauling between fixed points. One may be always loading, another unloading and a third in transit.

MEETING COMPETITION

The Motor Truck is an aggressive force in overcoming competition.

THE problem of competition, through the introduction of motor trucks into so many different kinds of business, has become greatly intensified.

Every business that, through efficient motorization, can haul goods more economically and rapidly, that can tap sources of supply independent of the railroads, that can meet transportation emergencies, will find competition increasingly easy to overcome. A case in point—

How SERVICE Trucks built up a business.

> ***Quigley & Meeker, Youngstown, Ohio, four years ago, facing strong competition, met the situation by discarding horse drawn vehicles and replacing them with SERVICE Motor Trucks. The performance of their fleet of SERVICE Trucks—unfailing, dependable, powerful and economical and successfully competing with all opposition—has been a vital factor in building up their business, against strong competition, to the dominant position which it occupies today.***

Firms that have not already efficiently motorized their business, will find themselves at a decided disadvantage.

SERVICE Trucks are constructive carriers.

SERVICE Motor Trucks have been designed to meet the broadest demands of aggressive business competition. In the every-day test, SERVICE Trucks are proving active *Builders of Business* for manufacturers, jobbers, merchants and farmers in all parts of the country. The paragraph below is a composite endorsement by SERVICE Motor Truck owners:

These SERVICE owners wrote the composite endorsement—

The Dodd Warehouse, San Francisco.
Louisville Builders Supply Co.
Kothe, Wells & Bauer Co., Indianapolis.
A. McGee, Cincinnati.
Gardner Cartage Co., Cleveland.

> ***"We can enthusiastically endorse the value, power, economy, strength and prestige of SERVICE Motor Trucks; They have given remarkable service; We have perfect confidence in this truck; In the past two years this truck has never been out of use a day; We have determined to Standardize on SERVICE equipment."***

There is a SERVICE Motor Truck that will meet the exact requirements of *your* business. Seven models, from one to five tons.

Service
MOTOR TRUCKS
Builders of Business

SERVICE MOTOR TRUCK CO. Wabash, Indiana. U. S. A.
NEW YORK—87-89 West End Avenue
CHICAGO—2617-25 So. Wabash Avenue

REVIEWS OF NEW BOOKS
Continued

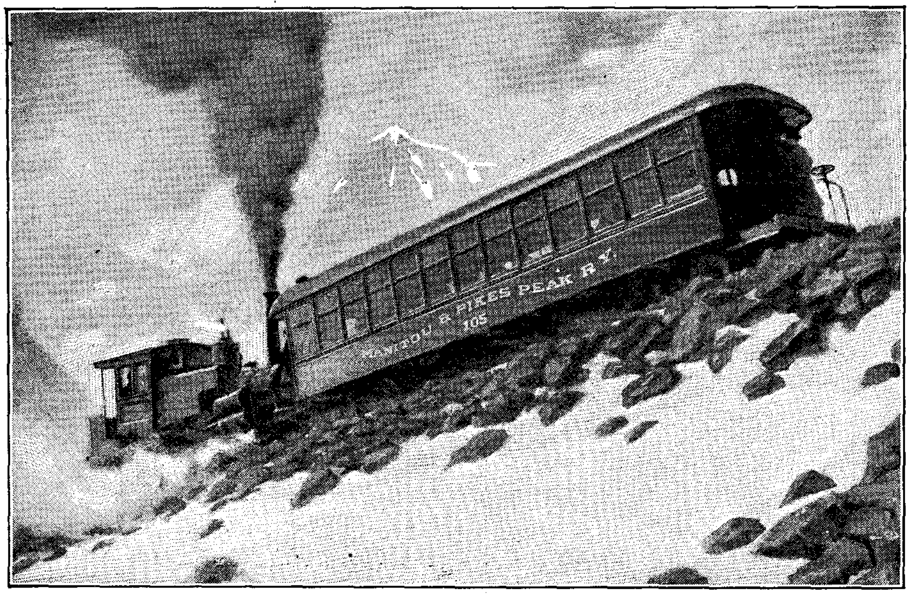
typical of their order. And the struggles and the agony by which this poor and isolated community freed itself from its gloomy bondage, the means by which it secularized its education and its government, won for itself the blessing of free thought and speech, and matured a system of constitutional liberty which has been the foundation of the American Union, rise in dignity to one of the supreme efforts of mankind."

To exemplify all this, the author portrays the episode of "The Antinomians" especially as concerned with Anne Hutchinson —a shameful chapter indeed; summarizes the history of the creation of the Cambridge platform, which is traced ultimately to interference by the clergy in the matter of militia; gives an account of the Anabaptist persecution in defense of infant baptism, and also of the no less unsavory affair of the persecution of the Quakers; rehearses the story of the *scire facias*, by which the autocratic power of the ministry was broken; passes to the witchcraft delusion; and retells the story of the formation of the Brattle Street Church. The chapters which follow deal with Harvard College, the lawyers, and the Revolution, all treated to bring out the influence for evil of the ministry, or, as the author prefers to call it, the priesthood. And underlying the whole, almost insidiously inwrought into the texture of the fabric, is an evident animus against one of our great religious bodies. We have heard that the issue of the first edition produced a controversy on this account. If so, one can hardly wonder. The author admits on the first page of his preface to the new edition that if he were rewriting it he "might soften its asperities somewhat, here and there." Assuredly he might, and the book would in that way gain a great "somewhat, here and there."

For it leaves the impression of a man overwrought by events that are in the past —events which no one would now justify or excuse, which could not now occur, but are seen to have been the result in great part of the times and the situation, and are recounted with a lesser degree of passion in many other places. The almost unavoidable impression formed is that the work was and is intended to cast odium upon a church of to-day because of doings for which that religious body is not responsible. Some curiosities come out in the book which are worth noting. The following paragraph may be compared with a modern trend in the world of labor:

> "In 1321 complaint was made against the London weavers for injuring the public by passing regulations tending to raise the price of cloth. It was alleged that the gild, with this intent, had limited the working hours in the day, the working days in the year, and the number of apprentices the freemen might employ; and the prayer was that for these abuses the charter should be annulled."

The author missed a point by not showing that the "priesthood" was in reality to blame here also. We are tempted to ask—Is it possible that there were other wicked forces in existence? The new preface appears to have the purpose of showing that the wicked course of the "priesthood" in Massachusetts was only one of the ordinary facts of history. Accordingly in the first hundred pages or so we are treated to a study of the career of



A Valspar Varnish test in the clouds—

DAY in and day out the cars and engines of the Pike's Peak Railway make their trips thousands of feet up and down the snow-covered mountain.

They are exposed to rain and snow and hail and mist. They are subject to quick and extreme temperature changes, as they rise or descend 7600 feet in a few minutes. The sun beats down on them mercilessly, often while they are still wet with the mist from the clouds.

In a recent letter to us Mr. H. J. Holt, President and General Manager of the railway, says:

> "Our Company has been using Valspar for our locomotives and coaches for the past eight years, and we are pleased to state that we find it superior to any other varnish we have ever used. It stands up better under the unusual atmospheric conditions to which our equipment is subjected, during the trips on the 'Cog Road' from Manitou (an altitude of 6500 feet) to the Summit of Pike's Peak (an altitude of over 14,100 feet)."

Isn't this the kind of varnish you want when you varnish anything around the home?

VALENTINE'S
VALSPAR
The Varnish That Won't Turn White

Valspar is easy to apply, it dries over night, and it wears and wears and wears and wears. Use it on your floors, your furniture, your woodwork (indoors and out), and your linoleum. It is worth twice as much as ordinary varnish, yet it costs only a very little more.

VALENTINE & COMPANY, 456 Fourth Ave., New York
Largest Manufacturers of High-grade Varnishes in the World—Established 1832
New York Amsterdam VALENTINES VARNISHES TRADE MARK Boston Chicago
Toronto London
W. P. FULLER & Co., San Francisco and Principal Pacific Coast Cities

Copyright, 1919, Valentine & Company

Special Offer: Don't be content merely with *reading* about Valspar—*Use it.*

For 25c in stamps we will send you enough Valspar to varnish a small table or chair. Or, if you will write your dealer's name on bottom line you need send us only 15c for the sample can.

Your Name...

Your Address...

Dealer's Name...

Literary Digest—12-27-19

VITAL TO EMPLOYER, EMPLOYEE, ECONOMIST, EDUCATOR

The *National Industrial Conference Board*, a co-operative Federation of American Industries, organized to provide a clearing house of information and a forum for constructive discussion, has issued various publications dealing with such topics as wages, hours, collective bargaining, arbitration, labor policies, sickness and accident insurance, and other vital industrial problems. Employers, employees, economists and educators will find in the Research Reports of the National Industrial Conference Board an unbiased statement of facts developed through careful and extensive research.

Works Councils—American experience in 225 industrial establishments with this new development in industry—Research Report No. 21 - - - - **$1.50**

Wartime Changes in Wages—in eight leading industries between September 1914 and March 1919, analyzed in Research Report No. 20 - - **$1.50**

Cost of Living—Cumulative figures on changes from July 1914 to November 1918, March 1919, and July 1919—Research Reports Nos. 14-17-19, each **.75**

Hours of Work as Related to Output and Health of Workers

Report No. 4—Cotton Manufacturing **$1.00**
" " 12—Wool Manufacturing **1.00**
" " 16—Silk Manufacturing **1.00**
" " 18—Metal Manufacturing **1.00**

Industrial and Labor Problems in Great Britain, France and Italy—special 425 page report by European Commission of National Industrial Conference Board - - - - **$2.50**

Complete List of Publications sent on request

Industrial News Survey
Important industrial news in concise form
Weekly, **$2.00** a year

Address Dept. F

NATIONAL INDUSTRIAL CONFERENCE BOARD
15 Beacon Street Boston, Mass.

FOWNES
NAME IN EVERY PAIR

Whatever the material—leather silk or fabric; whatever the occasion, you can *depend* on the fit and style of Fownes

GLOVES
FOR MEN, WOMEN & CHILDREN

REVIEWS OF NEW BOOKS
Continued

Moses—with a good many side-glances at later episodes of misdirected religious zeal. Among the rest are these two sentences which follow a somewhat cocksure account, of the alleged physical appearance of Moses:

"Educated by his foster-mother as a priest at Heliopolis, he was taught the whole range of Chaldean and Assyrian literature, as well as the Egyptian, and thus became acquainted with all the traditions of oriental magic, which, just at that period, was in its fullest development. Consequently, Moses must have been familiar with the doctrines of Zoroaster."

Passing by the declaration of Moses's knowledge of the doctrines of Zoroaster, who, according to the best authorities, did not live till half a millennium later, we venture the assertion that it would be difficult to find a sentence which contains as many affirmations impossible to verify, and in large part demonstrably erroneous, as the first of these. But it is needed for the rickety and top-heavy structure reared in the following pages, which consists in part of assertions that Moses was a master magician, that by his magic the people were bamboozled and his power built up, that in failing or jealousy he murdered Aaron, and finally committed suicide. This is the outcome of a perverse and arbitrary interpretation. It is fortunate that the text of the book is not built after the pattern of this part of the preface.

FREDERICK II. AS KING OF PRUSSIA

Young, Norwood. The Life of Frederick the Great. 8vo, pp. viii-433. New York: Henry Holt & Co.

For a new life of so well-known a character as Frederick, in the face of all that has in recent years been written about him, two reasons might be found: (1) A new interest caused by current events; (2) New sources that have turned up new material. Both reasons may be urged for Mr. Young's book. (1) Policies prevalent during the war and in preparing for it have been many times traced back to this man, who was the first of the Hohenzollerns "born to be king of Prussia," since his father, Frederick William I., had elevated Prussia from an "electorate" into a kingdom, thus his eldest son was "born to the purple." The ruthlessness and deliberateness of Teutonic aggression that found its cynical formulator in this man are well brought out. (2) The new sources are the great collections of Frederick's correspondence, running to thirty-six volumes (1879–1914); and the military histories of the Austrian and German General Staffs, in twenty-six volumes (1890–1913). Besides these, a considerable number of monographs and articles bearing on various phases of the subject have lately become available. The result of consulting these is a portrait sketched out in broad lines rather than delicately and with much detail. In fact, the topic does not yield readily to "fine" treatment.

The frequently told tale of the rise of the Hohenzollerns occupies a brief chapter; then comes a description of the sordid character and doings of Frederick William I., father of Frederick the Great. A chapter tells the horrible story of the unnatural relations between these two. Another tells of the marriage of the son, "for freedom," to a princess whom he subsequently blackly deserted. Here was the beginning of the intimacy with Voltaire. It is also the

RED CROSS
6 cts. per BOX
COUGH DROPS
RED CROSS
TRADE MARK
COUGH DROPS
I'll say it's good

Get a Box Today

Put a Red Cross Cough Drop in your mouth and let it melt. It's a flavor you'll like. They are good for kids or grown-ups.

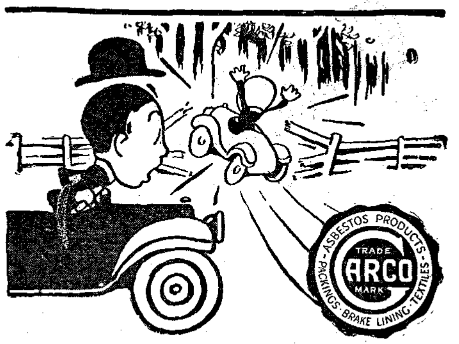
Nothing like them for relieving a cough. Smokers and speakers use them to take the scratch and tickle from their throats.

Made of chemically pure ingredients. Famous for 30 years. Sold by drug, candy and cigar stores everywhere.

Handy Box—Packed Full—6 Cents

Made by
CANDY BROS. MFG. CO., St. Louis

BRONZE TABLETS
Free Book of Designs
Jno. Williams, Inc., 538 West 27th St., New York



Never Had a Runaway

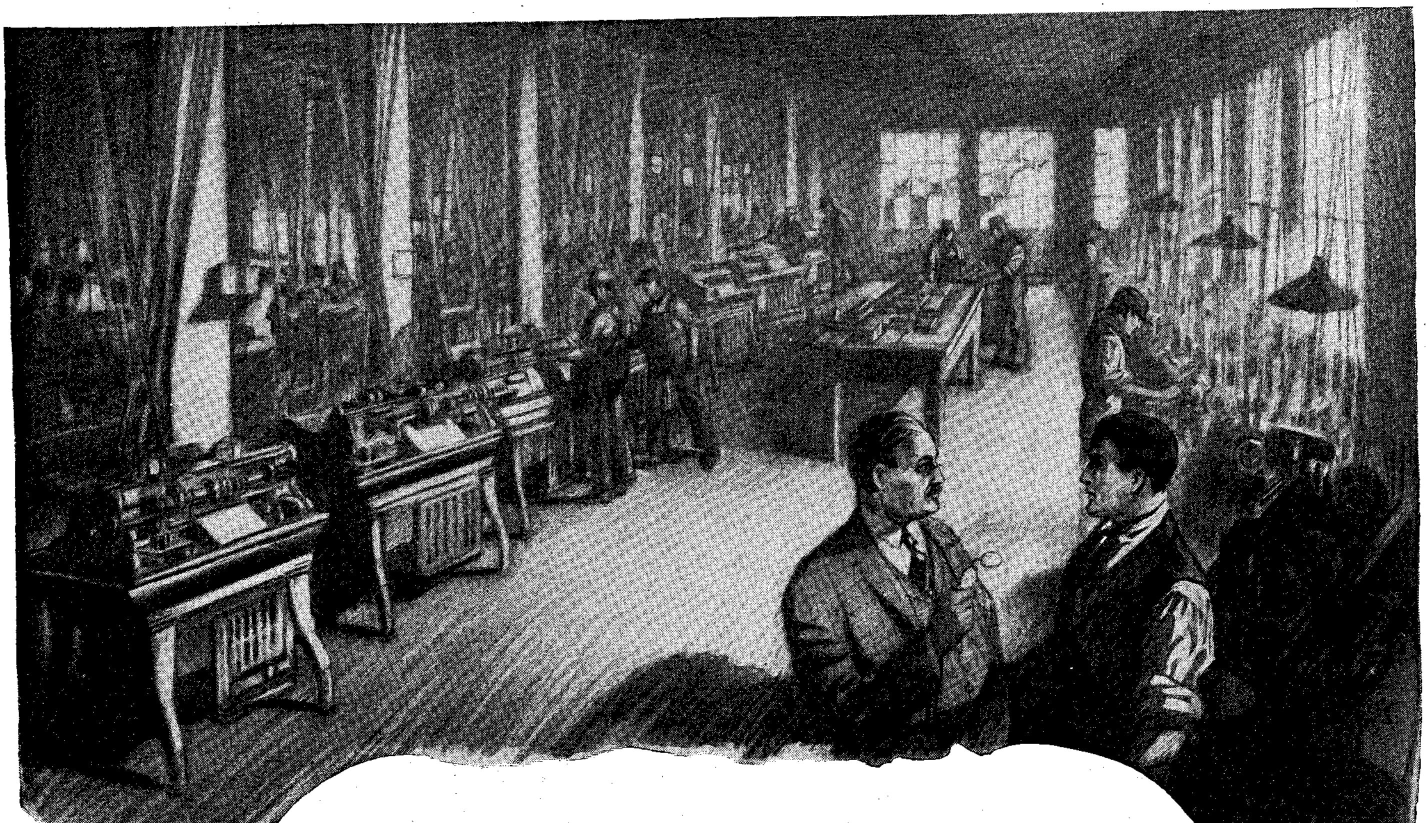
Garco makes your double six as dependable as "old Dobbin". You may be cutting along like a sub chaser, but your car is always under control. You can come to a standstill in the shortest kind of time.

Tough, long wearing, sure gripping suggests the sort of service you will get from Garco Asbestos Brake Lining.

Your dealer has it or can get it for you.

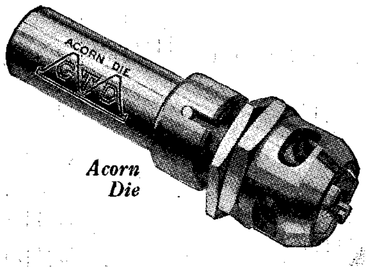
General Asbestos & Rubber Co.
Charleston, S. C.
NEW YORK CHICAGO PITTSBURGH

GARCO
ASBESTOS
BRAKE LINING



Purchasing Agent Saves $1000 Buying More Expensive Tools

Gun Tap



Acorn Die

Snap Gage

THE purchasing agent in a Connecticut manufacturing plant wondered why his company made such frequent purchases of round dies for cutting threads on the screws in their machines.

Out in the factory, he discovered a battery of automatic screw machines being fed with those dies almost as rapidly as with the metal stock.

This purchasing agent did some thinking. Then he set out to find dies that would be longer lasting, and cleaner cutting than those he had seen discarded—often at the rate of two a day per machine.

"Wouldn't one of those GTD men help out here?" was his question. One was called.

Backed by GTD's experience of 46 years this specialist went into the shop as a practical machinist, analyzed the stock, the cutting speed, the lubrication, and other details. Then he prescribed Acorn Dies, a GTD specialty, to replace the round dies.

Today, in that plant, Acorn Dies cut perfect commercial threads—not for an hour or two—but for *weeks at a time* without re-sharpening or die adjustment.

The men in the automatic room are GTD enthusiasts. The company's product—a complicated machine with closely fitted parts—is made better and more economically.

The purchasing agent's apparent intrusion was not only justified but encouraged, for the saving in actual cash on this one item was more than a thousand dollars a year.

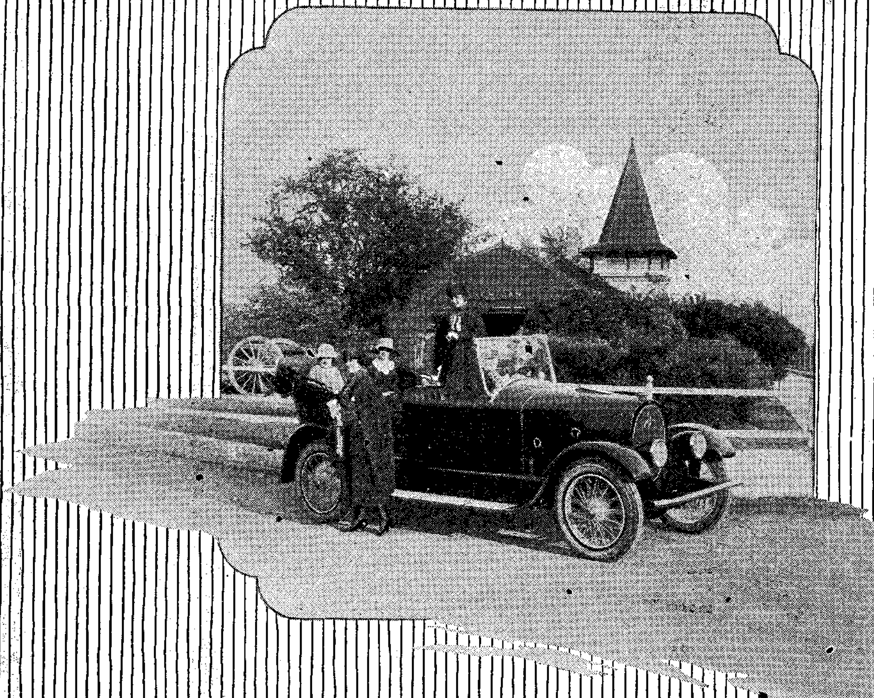
Asking a question alone won't save money, but the answers of a specialist do, so frequently, that more manufacturers are inviting GTD men to call and are following their advice.

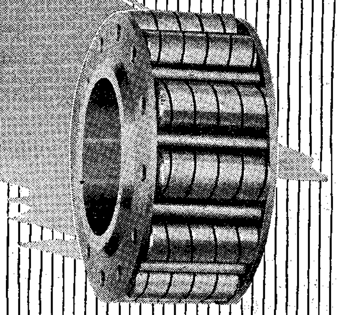
Our Booklet "Tools and Dividends" suggests ten questions every executive, plant superintendent or purchasing agent ought to ask. Your copy is ready for mailing.

GTD REG. U.S. PAT. OFF.

GREENFIELD
TAP & DIE CORPORATION
Greenfield, Massachusetts, U.S.A.
Canadian Plant: Wells Bros. Co. of Canada, Ltd., Galt, Ontario

[154]





Designed to perform one vital service well—that of quietly overcoming friction

HYATT
QUIET
BEARINGS

REVIEWS OF NEW BOOKS
Continued

period of the latter's hypocritical refutation of Machiavelli, edited by the Frenchman.

On October 25, 1740, when twenty-eight, Frederick became king. To those who knew him, his accession was the signal for a new brand of hypocrisy—pretense of care for the people when his only real concern was for himself and his dynasty. On December 3 his troops left Berlin on the first Silesian expedition and the first treacherous attack on Maria Theresa of Austria. The second followed just a year afterward (December 27, 1741). His principle in this and his subsequent acts was that "a sovereign is above all law. He has to deal only with other sovereigns, and they are to be overcome by fraud or violence." He had gained Lower Silesia. In 1743, aiming at Upper Silesia, he attacked Austria for the third time, on the pretense that after Maria Theresa was through with France, she would attack him, and he must anticipate, forced by "necessity." Each case involved the breaking of a treaty. It will be noticed how "necessity" and a "scrap of paper" entered early into the Teutonic scheme. One of the notable things of which the volume, here and elsewhere, reminds us is that, while the American colonies were entering the War of Independence, Frederick joined Russia and Austria in "the greatest crime of modern history—the dismemberment of Poland." This crime was consummated when our Constitution was first "giving form and substance to the principle of self-government."

Our author conducts us swiftly through the Sans Souci episode at Potsdam, the visits of Voltaire, Frederick's insincerity, and his attempt to betray Voltaire being a traitor to France. Then came in 1756 the beginning of the Seven Years' War. The story of this covers 170 pages—the longest chapter in the book. Succeeding chapters deal with the period of recuperation, Frederick's "enlightened despotism," the partition of Poland, the Saxon invasion with its Prussian *Schrecklichkeit*, the conclusion, and a bibliography and index, with an illuminating appendix on the Dresden episode.

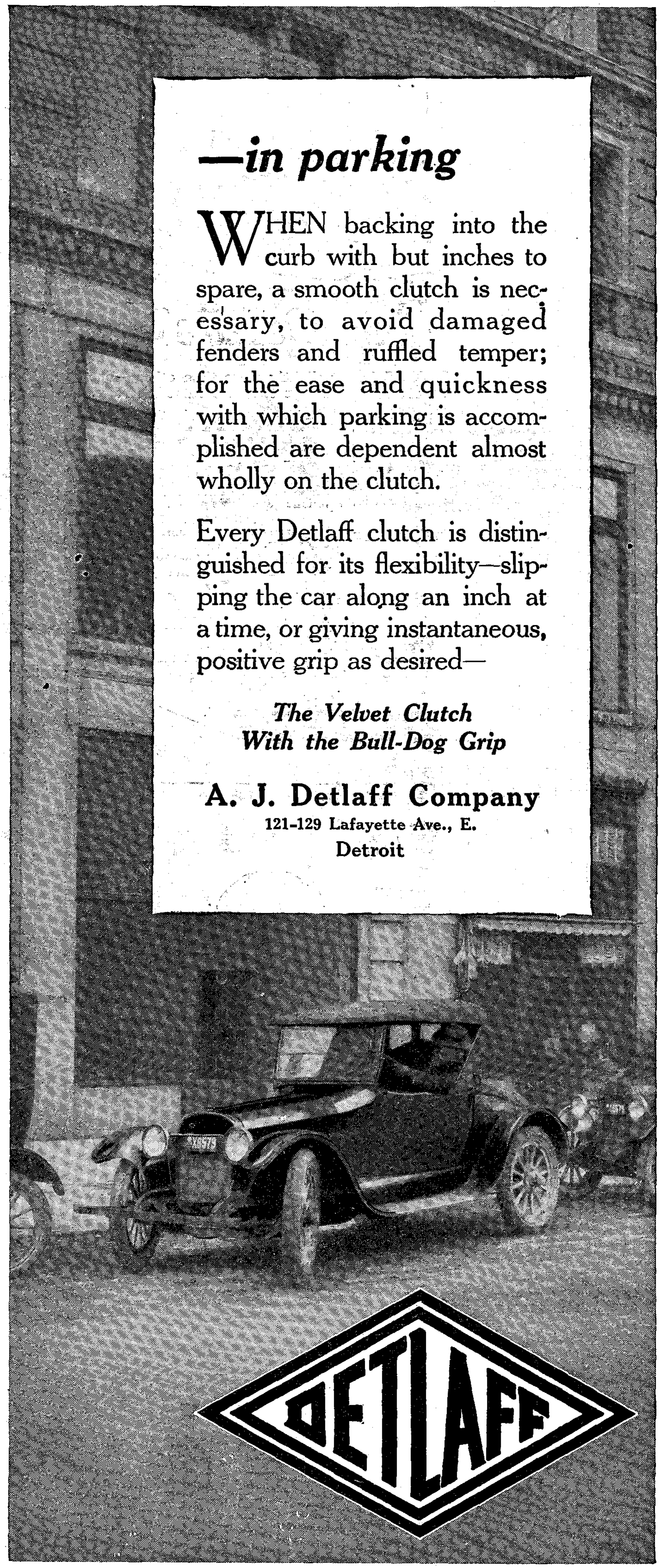
One can hardly help reflecting that Wilhelm II.'s admiration for Frederick "the Great" had no little to do with the behavior of the German Army in occupied or abandoned territory in the war of 1914–1918. The "Great Frederick" was the founder of modern Prussianism as the world knows it.

JAMES MONROE TAYLOR

Haight, Elizabeth Hazelton. The Life and Letters of James Monroe Taylor, President of Vassar College, 1886-1914. New York: E. P. Dutton & Co.

Dr. Taylor was of the generation of college presidents sprung from the ministry. His chief distinction in the educational world was his championing of woman's right to mental training as thorough as that given to men. He brought Vassar College to an excellently high standard through his own force as a teacher and his own vision as the chief executive. Those qualities which identified him as a young man preparing for the ministry were carried over with ripened excellence into his constructive building for the welfare of the vast army of young women who, during the twenty-eight years of his guidance of Vassar, came under his influence.

The moral note, therefore, is the one most sounded in the book as compiled by the Professor of Latin at Vassar. It has



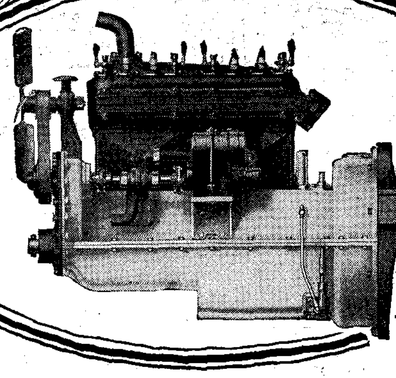
—in parking

WHEN backing into the curb with but inches to spare, a smooth clutch is necessary, to avoid damaged fenders and ruffled temper; for the ease and quickness with which parking is accomplished are dependent almost wholly on the clutch.

Every Detlaff clutch is distinguished for its flexibility—slipping the car along an inch at a time, or giving instantaneous, positive grip as desired—

The Velvet Clutch
With the Bull-Dog Grip

A. J. Detlaff Company
121-129 Lafayette Ave., E.
Detroit



What the Extra Dollars Buy

WISCONSIN MOTORS do cost slightly more than others—but every extra dollar of added price buys twice its value in service.

This extra cost is due to Wisconsin's superior workmanship—to the extra care that is taken to make it operation-perfect before it ever leaves the factory. Every working part is adjusted to the thousandth of an inch. The whole motor is carefully fitted, and run in, tested and inspected. Then torn down, refitted, reassembled and again tested and rigidly inspected.

The result is a master power plant that costs more—and is worth it.

It insures you an engine that will run for months without adjustments, except those simple ones that anyone can make.

Two years from now, when cheaper built motors are worthless, the Wisconsin will still be furnishing its characteristic dependable power.

Look under the hood. If the motor bears the mark "Wisconsin" you can buy safely.

Specifications and booklet, "Honors Wisconsin Has Won," on request.

WISCONSIN MOTOR MFG. CO.
Station A, Dept. 350 MILWAUKEE, WIS.

Distributors: New York Branch: T. M. Fenner, 21 Park Row, Factory Rep.
Marine Equipment & Supply Co., 610 Arch St., Philadelphia, Pa.
Pacific Coast Distributor:
Earl P. Cooper Company,
1310 So. Los Angeles Street,
Los Angeles, Cal.

DOUBLE A
AA
BROWN
FOR
A A
BROWN
FOR DARK TAN AND BROWN SHOES
S.M. BIXBY AND COMPANY
NEW YORK U.S.A.

BIXBY'S
A LIQUID 25¢
DOUBLE A
A A
DAUBER WITH EACH BOTTLE
BROWN
Shoe Polish for Dark Tan and Brown Shoes
The "especially requested" wax brown shoe polish made for Army Officers' Shoes
Now on sale at leading stores
Quick—clean—No paste required
EASIEST TO USE

S. M. BIXBY & CO. Inc.
NEW YORK

REVIEWS OF NEW BOOKS
Continued

a double value, as portraying the activities of a worthy character, and as outlining a significant period in the history of Vassar. The letters quoted are varied and significant for their kindliness of tone and "hominess" of feeling. No family of children ever had a more considerate father than the Taylors, as is witnessed by the colorful letters written to Huntington; no friends had a more conscientious correspondent than the friends of Dr. Taylor, to whom, on his frequent trips abroad were sent appreciative if not brilliant letters about the countries visited and sights seen—just such letters as one would expect from a man given slightly to the didactic.

Professor Haight has erred, one might say, on the side of too much appreciation of Dr. Taylor's work, without giving her energies to the human portrait of Dr. Taylor himself. There is not a phase of his activity that is not touched upon; but there is little atmosphere to be gained from mere statement or admiring comment. We are not made to feel the full value of his home life, the warmth of that environment, and intercourse which made President Taylor so great a friend of the student body at Vassar. These defects will not prevent the book from being a welcome memorial of a beloved college president. Well may his memory be revered by Vassar, for her strength to-day is largely due to Taylor. When, some years ago, he was called to Brown University, and finally declined the honor, there was ample evidence given of the reverence in which he was held.

AMERICAN AUTHORS OF A RECENT "GOLDEN AGE"

Ellsworth, William Webster. A Golden Age of Authors. A Publisher's Recollection. Pp. 304. Boston: Houghton Mifflin Company.

No spot on the map of the Eastern United States, perhaps, might be more truthfully called the literary center than the office of *The Century Magazine* during the three decades between 1880 and 1910. At its focal point sat Mr. W. W. Ellsworth, finally to be the head of the original Century Company, publishers of this magazine, *St. Nicholas*, and of the books issued by the house and printed at the DeVinne Press, which was its creation. It was to be expected, therefore, that a volume of recollections of the men and doings in the large circle drawn about this fountain of literary and artistic production would be of fascinating interest.

The early history of *The Century* (named after the celebrated club of intellectual men in New York City), which was the venture of a man, Roswell Smith, without experience in publishing, but having an ambition to lift the new periodical above the level of the time in form as well as in contents, reads like a literary crusade. Roswell Smith was a noble man, and seems to have had singular insight in choosing his aids. Dr. Holland was a cofounder rather than an assistant, but most of the other men who began with the birth of the enterprise—Scott, Ellsworth, Gilder, R. U. Johnson, Will Carey, and others, including several very successful women—stayed to the end. The single important exception was Frank Stockton, who cut loose voluntarily from editorial work. These people fitted together, admired, and loved one another—it was a "mutual admiration society" really worth while. They took their fun together, largely, as well as their work; and they

REVIEWS OF NEW BOOKS
Continued

em to have shared their acquaintances—hich was grist to Mr. Ellsworth's mill. his steady and amiable cooperation conibuted much to the prosperity so long joyed by the old house; and the reader ust remember this should he feel that the ook is somewhat overladen with praise of e author's associates. We learn interestg facts thereby. Who would have suposed, for example, that the title of Frank tockton's famous story, "The Lady or the iger," was not of his own choosing? He lled it "The King's Arena," and Will arey it was who scratched out that inefctive head-line and substituted one that ttracted instant attention.

This is only a sample of the wealth of urious information in the book, often in e form of amusing anecdotes about the en and women whom all magazine readers now by their writings at least. Queer onfidences are sometimes disclosed, as of r. J. G. Holland's dislike of John Hay's allads; that Margaret Deland wrote her rst poem in a butcher-shop; and how enry James handed 'round the plates at a arty. Most interesting will be the statement, well explained, that in "Mr. Britling ees It Through," Mr. Wells has described imself, his home, and neighbors, in an lmost autobiographic way.

Mr. Ellsworth justly pays much attenion to the matter of illustrations—an art which *The Century* boldly experimented nd soon excelled all its rivals, giving an mpulse that was felt throughout the whole ountry, and which forced a great advance n the illustration of books as well as of eriodicals. Many now famous artists rst came to notice as *Century* illustrators nder Drake's encouragement; and Mr. llsworth has much to say of St. Gaudens, ole, Alexander, Blashfield, Gibson, and thers who were friends as well as clients; nd an admirable index enables the reader o turn easily to their names.

IFE UNDER THE SOUTHERN CROSS

O'Brien, Frederick. White Shadows in the outh Seas. With many illustrations from photographs. Pp. 450. New York: The Century Company

If the title did not indicate the source of the incidents and experiences in this volume there might be a little guessing and hesitation on the part of some as to the place where the author tells us he spent a happy year—Altuona Valley on the island of Hiva-oa in the Marquesas.

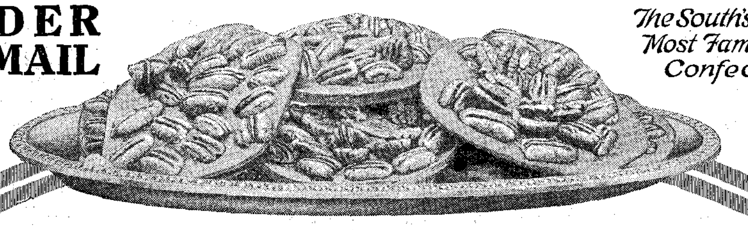
The Marquesas Islands—the farthest islands of the far South Seas—are not large. Sixty or seventy miles is the greatest circumference. Some of the eleven are quite small and have no inhabitants now.

> "No liners touch them; no wire or wireless connects them with the world. No tourists visit them. Their people perish. Their trade languishes. In Tahiti, whence they draw almost all their sustenance, where their laws are made, and to which they look at the capital of the world, only a few men, who traded here, could tell me anything about the Marquesas.

It was at Vait-hua where the French took possession of the Marquesas, and since 1842 the flag of France has been over these islands.

One finds a pathetic note running through this fascinating volume. It is the story of the white man's cupidity and exploitation, the attempt to mold a courteous and hospitable people to another pattern.

ORDER BY MAIL



The South's Most Famous Confection

ORIGINAL
CREOLE PRALINES
(GRUNEWALD)

Scrupulous care is maintained throughout in producing this famous candy. That's why Original Creole Pralines (*Grunewald*) made only of Louisiana cane sugar and Louisiana (whole half) pecan meats are regarded everywhere as the highest quality Creole Pralines made.

Let the kiddies eat all they want. Absolutely pure and the oil from the nut meats is good for the digestive system.

Also a delightful dessert or after dinner dainty.

Produced in a model, new and absolutely sanitary factory.

Mail orders filled anywhere.

Sent in a protected carton—each "Praline" wrapped in glazed paper. Carefully packed.

P. O. or Express Money Orders, or Personal Checks received.

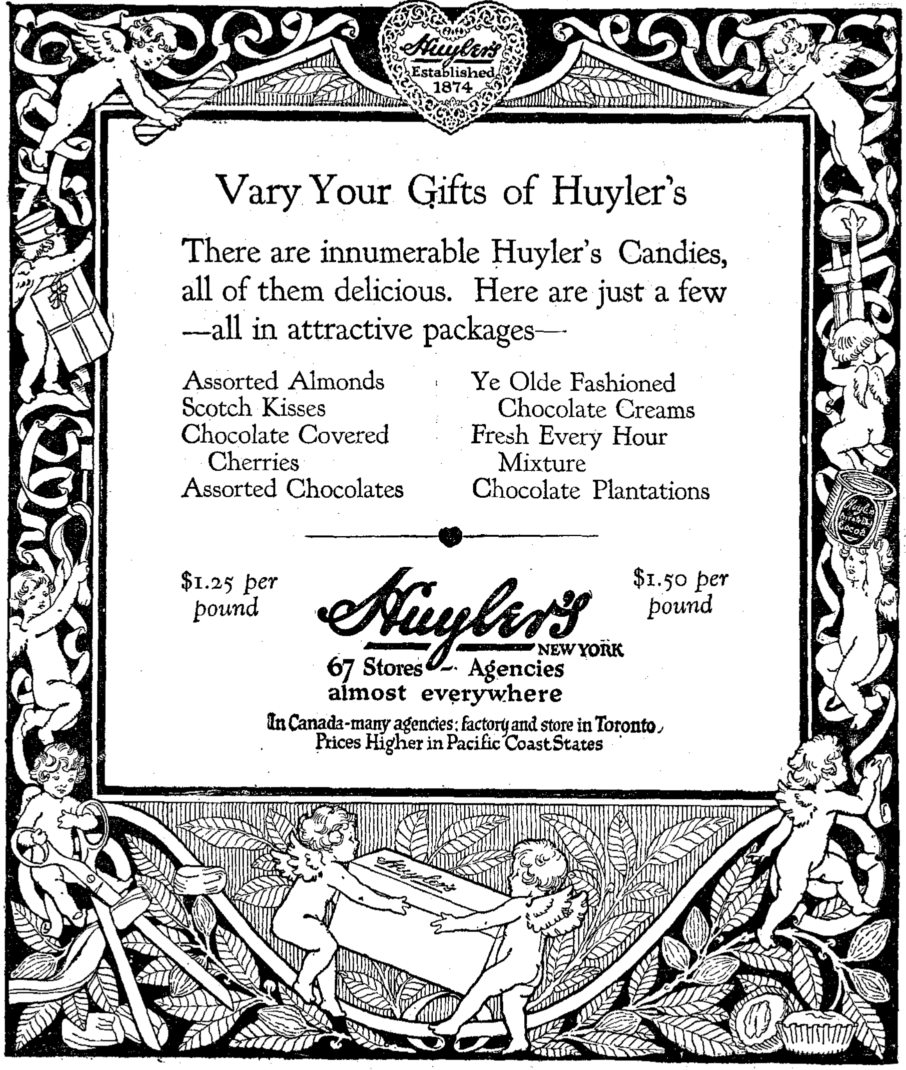
BOX OF 7 (Sample)	$1.00
BOX OF 12	1.50
BOX OF 24	3.00

Sent Parcel Post, prepaid, insured.

DEALERS WRITE FOR PARTICULARS

The HOTEL GRUNEWALD CATERERS
Dept. L NEW ORLEANS, LA.

14



Vary Your Gifts of Huyler's

There are innumerable Huyler's Candies, all of them delicious. Here are just a few —all in attractive packages—

- Assorted Almonds
- Scotch Kisses
- Chocolate Covered Cherries
- Assorted Chocolates
- Ye Olde Fashioned Chocolate Creams
- Fresh Every Hour Mixture
- Chocolate Plantations

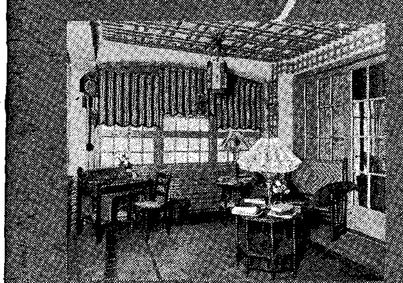
$1.25 *per pound*

Huyler's NEW YORK

$1.50 *per pound*

67 Stores — Agencies
almost everywhere

In Canada-many agencies; factory and store in Toronto,
Prices Higher in Pacific Coast States



Beautiful Birch

WHAT GUIDES YOUR CHOICE of WOODWORK?

A preference for this or that appearance is not a sufficient guide in selecting the woodwork for your home.

You should *know* not only that your woodwork will be beautiful but that it will *stay* beautiful year after year.

"Beautiful **birch**" is hard, strong, wear resisting. It can be stained or enameled in *any* finish you choose.

The new **birch** Book tells much of interest and profit to builders and you will find it well worth reading. Your copy is awaiting your address. May we have it?

The Birch Manufacturers
212 F. R. A. Bldg. Oshkosh, Wis.

Beautiful birch

STANDARD DICTIONARY superiority quickly becomes plain to the man or woman who investigates.

REG. TRADE MARK

Rest assured-

Recommended by 11,886 dealers

Faultless SINCE 1881
Pajamas & Night Shirts
"The NIGHTwear of a Nation!"
E. ROSENFELD & CO. BALTIMORE-NEW YORK.

REVIEWS OF NEW BOOKS

Continued

And that is not the only dark picture presented. Tuberculosis and consumption have carried off more than four-fifths of the inhabitants of these islands.

"A hundred years ago there were a hundred and sixty thousand Marquesans in these islands. Twenty years ago there were four thousand. To-day I am convinced that there remain not twenty-one hundred."

It is the judgment of the author that many of them are dying because of the suppression of the play instinct, an instinct—

"that had its expression in most of their customs and occupations. Their dancing, their tattooing, their chanting, their religious rites, and even their warfare, had very visible elements of humor and joyousness."

What these people needed most they did not get, "a brother who walked in the sunlight and showed the way."

To have fraternized with the sons and daughters of cannibals for a year is, to say the least, a most unusual experience. The experience was made pleasant and profitable by a fine sense of appreciation and adaptability. The author's descriptions of this simple savage folk, their life and their beautiful country, are portrayed in realistic style.

A BOOK OF NEW WORDS

Smith, C. Alphonso. New Words Self-Defined. Pp. 215. New York: Doubleday, Page & Co.

This is a volume of a few selected words that have come into prominence since the publication of the "New Standard Dictionary" in 1913. Under each word the editor has given a definitive quotation (or occasionally more than one) from some author's pen or some periodical with the date of publication. Among these one meets now and then with terms that are not new, for they found their way into the dictionary years ago, such, for instance, as "Amerind" (1908), "argon" (1894), "barograph" (1865), "batman" (1809), "hello-girl" (1909).

In general, the extracts made give the correct meanings of the words selected, but are not always accurate. Thus, Mr. Warner tells us that the French word "cafard" means "literally, cockroach"; but a "cafard" is a *cagot*, or hypocrite; also, a bigot, and among schoolboys a *cafard* is a sneak or one who peaches on his pals. Under "carry on," Coningsby Dawson is credited with, "There is no explanation, save the great army phrase, 'Carry on.' We 'carry on' because, if we don't, we shall let other men down." Now, this phrase was not originally an army phrase. It has been in use in the language for centuries, in fact, since—if not before—Shakespeare used it in "Troilus and Cressida," written in 1606. Its first application to war we owe to Addison's *Spectator* 1712, and its first nautical use to a writer in *Blackwood's Magazine* for April, 1832—"Carry on, carry on! Reef none, boy, reef none!" "Click" in the sense of be killed is not new. It is dialectal English. "Jitney" receives recognition. "Pelmanism" gets a free and generous advertisement, but "efficiency," in the wide range given it by the "Mental Efficiency Series," is omitted altogether. The volume, however, is a welcome addition to the literature of our times, even if its contents in some cases must be accepted with caution.

BE One o
9,999 Women
to Get My Specia
PRICE OFFER

I AM going to name a price to you first 9,9
women who write me, that will simply ope
your eyes! I have made these Special Ba
gain Offers before—just as the Departme
Stores do. The big difference is, though, th
when you buy of me you are buying Straig
From the Factory!

Here's Your Chance to Make
a Record Saving on a

Rapid
FIRELESS COOKER

Aluminum Lined Throughout—Full Equipment
Highest Grade Aluminum Cooking Utensils.

—and get it on *30 Days' Free Trial*, too. Saves ⅜
¾ fuel costs. Cuts cooking work down to less than

But—You Must Write Quick. I will quote th
Special Low Price only to first 9,999 who write m
So—DO IT NOW.

Wm. Campbell, Pres.
WM. CAMPBELL CO.
Dept. 450 Detroit, Mi

Moisten Your Air

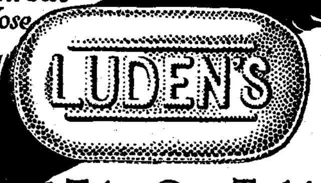
You can prevent colds, relieve catarrh, preserve furniture, woodwork and plants and cut coal bills with a

BUDDINGTON "THE WICK DOES THE TRICK" HUMIDIFIER

attached to your radiators and registers. Restores 6 quarts of water to the air daily. Sold by Hardware and Department Stores. If your dealer can't supply you, send for free trial offer.

GEO. W. DIENER MFG. CO.
401 Monticello Ave., Chicago, Ill.

For the Throat and Nose



Take Out Tickle

Refresh the mouth; sweeten the breath; clear the head; soothe the throat.

No coloring: no narcotics

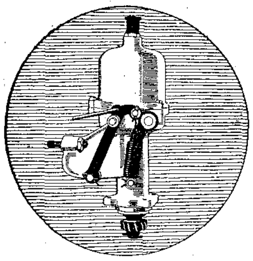
LUDEN'S
MENTHOL COUGH DROPS

Why didn't you tell me it would do this?

YOU men all say this to Clydesdale dealers after you have had the performance of the truck demonstrated to you.

All of our dealers, and we at the factory, have finally come to the conclusion that "The Driver Under the Hood," Clydesdale's automatic controller, cannot be described in words or writing.

You are hardly expected to believe us when we say that "The Driver Under the Hood", an exclusive, patented Clydesdale feature, really has more to do with the driving of the truck than the operator himself. It eliminates use of the accelerator in gear shifting, driving through crowded traffic, it saves fuel, tires and wear on the entire driving mechanism.



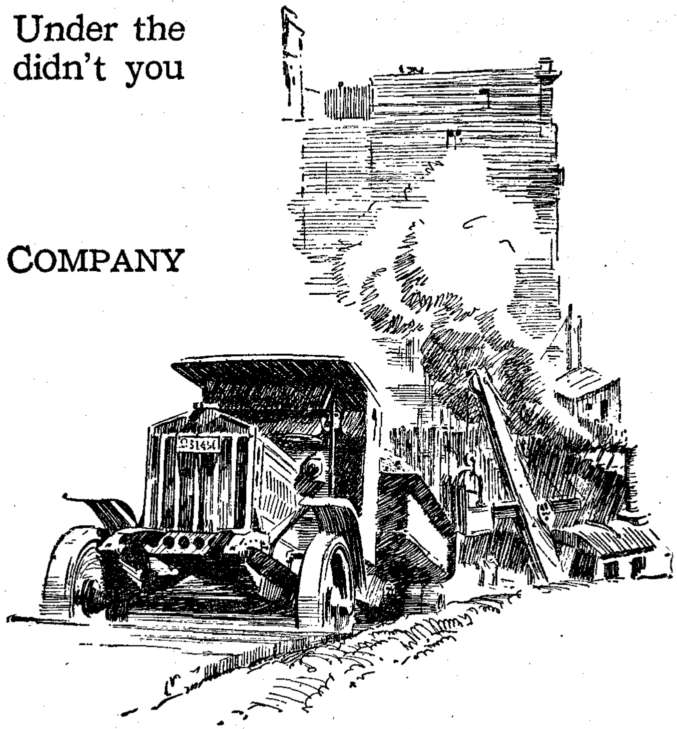
No Other Truck Has It
"The Driver Under the Hood"

Just go and ride in the truck. Drive it yourself, or let one of your drivers operate it. Find out what an excellent truck has been evolved from our eight years' building experience in which time we have installed trucks in thirty-one countries throughout the world. We have sold fleets of trucks to such big users as the West Penn Power Company, the American Tin and Terne Plate Company, Frick Coke Company and many others.

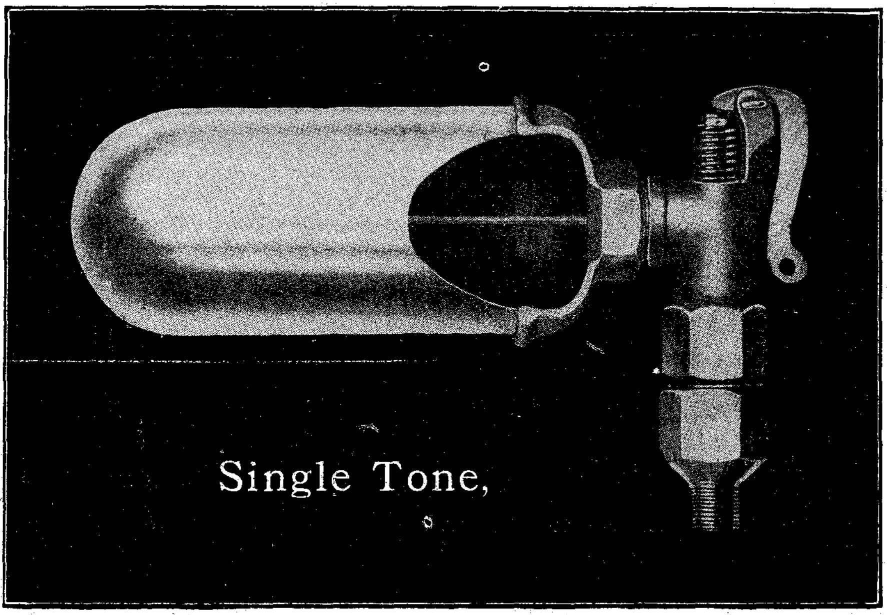
Watch the effects of "The Driver Under the Hood;" then you will say, "Why didn't you tell me it would do this?"

One to Five Tons Net Load

THE CLYDESDALE MOTOR TRUCK COMPANY
CLYDE, OHIO



CLYDESDALE



BUELL

EXPLOSION WHISTLE

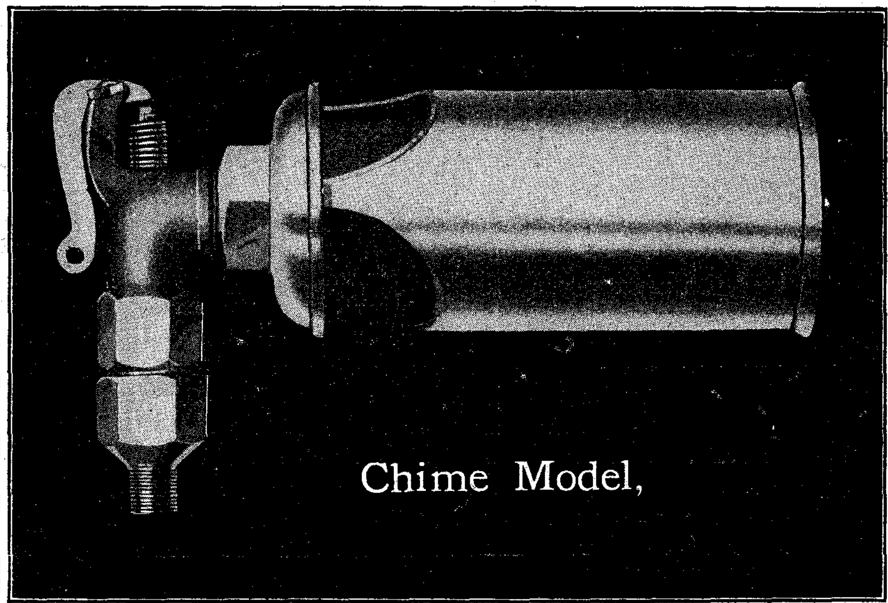
for Automobiles
and Motor Trucks

The Buell, more than any other signal, combines tremendous attention—winning power with simplicity and certainty of operation, durability and low cost.

It has been officially approved by the engineering departments of 62 motor car and truck manufacturers and adopted by them as equipment.

The Buell is the original explosion whistle operating with full engine pressure. It is guaranteed for 10 years. Made in Single Tone and Chime. Fits all cars. Ask your dealer or write us direct for circulars.

BUELL MANUFACTURING COMPANY
3001-05 Cottage Grove Avenue - Chicago, Illinois



INDIANS IN THE UNITED STATES

(*Continued from page* 40)

OUR INDIAN SOLDIERS—In recalling the last review of a brigade of American troops returned from France after the armistice the Commissioner notes that "in that triumphal scene were descendants of men who were Americans before 'Attila's fierce Huns' were beaten at Châlons, perhaps before the Siege of Troy." Something in this fact "will hold a page in history to the latest generation" and we read:

"Its meaning will unfold as the years pass, but even now it may be said that probably nothing more helpful has come to this ancient Indian race than the enrolment of ten thousand of its sons simply as American soldiers to challenge the barbarous rule of Central Europe.

"The immediate benefit comes from the equal opportunity they had with white comrades for gaining knowledge for maturing judgment, for developing courage through contact with events and conditions that trained and toughened character in the defense of a just cause and a great ideal. No education serves a man better than this in any circumstances. It puts into him the ability to 'go over the top' anywhere. The great lesson mastered by American soldiers, as their achievements clearly show, was to get things done. They are not likely to forget how. No Hindenburg line across the field of civil progress can stand against such fellows. They are destined for to-morrow's leadership. The wondrously multiplied interests of trade, industry, education, the professions, statesmanship, await them. The same sort of splendid initiative and self-reliance should find expression in action wherever the Indian soldier returns to his people. There are already assurances of this. Encouraging reports have come from superintendencies showing the Indian's war acquisitions, many of them indicating that he has discovered his educational needs and the equipment he must have to be successful, which is a most hopeful sign."

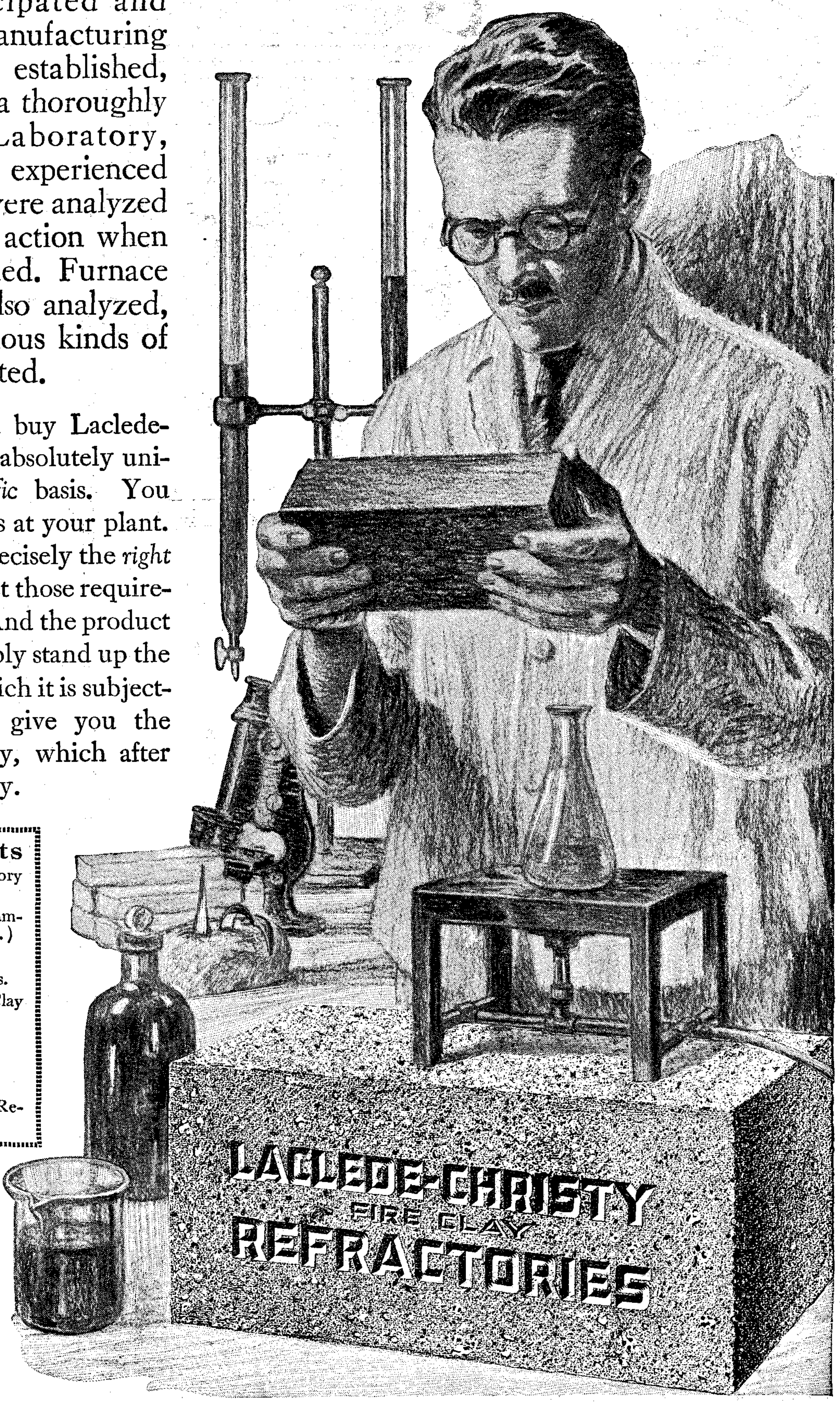
INDIAN THRIFT—In the purchase of Liberty Bonds the Indians received definite training in the direction of "a safe and wise use of money." Their application for bonds of the Fifth, or Victory loan, to the extent of nearly $4,000,000, brought their total subscriptions to approximately $25,000,000, or a per capita sum of about $75 for the whole population. Altho the year has been one in which the increased cost of nearly every necessity of life has greatly reduced the normal savings of all earning classes, reports on the sale of War-Saving Stamps indicate that the Indians have continued the purchase of them until their total investments now exceed $1,000,000.

BOARDING-SCHOOLS—The government Indian boarding-school provides for those in attendance lodging, subsistence, clothing, medical attention, and transportation, as well as academic and industrial instruction. The work of the Indian Bureau during the past half century, toward the civilization and education of the various Indian tribes, has borne rich fruit,

Science and Fire Brick

Laclede-Christy anticipated and prepared for present manufacturing conditions, when they established, some twenty years ago, a thoroughly equipped Ceramic Laboratory, under the charge of experienced Ceramists. Here clays were analyzed and classified, and their action when fired studied and recorded. Furnace gases and slags were also analyzed, and their action on various kinds of fire brick carefully charted.

The result is that today you buy Laclede-Christy Refractories on an absolutely uniform, standardized, *scientific* basis. You simply tell us the conditions at your plant. We then advise you as to precisely the *right* Refractory Materials to meet those requirements most satisfactorily. And the product we recommend will invariably stand up the longest under the use to which it is subjected—in other words, will give you the *most* service for *least* money, which after all, is the only real economy.



Some of Our Products

- —Fire Brick and Fire Clay Refractory Tile for every requirement.
- —Fire Clays (Bonding, Crucible, Enamelling, Lead Pencil, Modelling, etc.)
- —Suprafrax (Highly Basic) Brick.
- —Glass House Refractories and Clays.
- —Sewer Pipe and other Vitrified Clay Products.
- —Boiler and Stoker Tile.
- —Furnace Arches.
- —Automatic Stokers.
- —High Temperature Cements for Repairing Furnaces.

Distributors in a hundred cities put at your disposal a service not to be duplicated.

Branch Offices:

Chicago, 1366 Peoples Gas Bldg.
Pittsburgh, 901 Oliver Bldg.
New York, 504, 50 East 42nd St.
Detroit, 835 Book Building.

LACLEDE-CHRISTY

A BUSINESS INSTITUTION — FOUNDED 1844 ***ST. LOUIS***

Stewart
MOTOR TRUCKS

AMERICAN
CAR AND
FOUNDRY CO
DEPEW PLANT

World leadership in only seven years

ONLY seven years old, and one of the international leaders in truck building! This year the world paid over $9,000,000 for Stewart trucks and wanted more. In 1920, in a vast new plant, Stewart production will exceed $16,000,000.

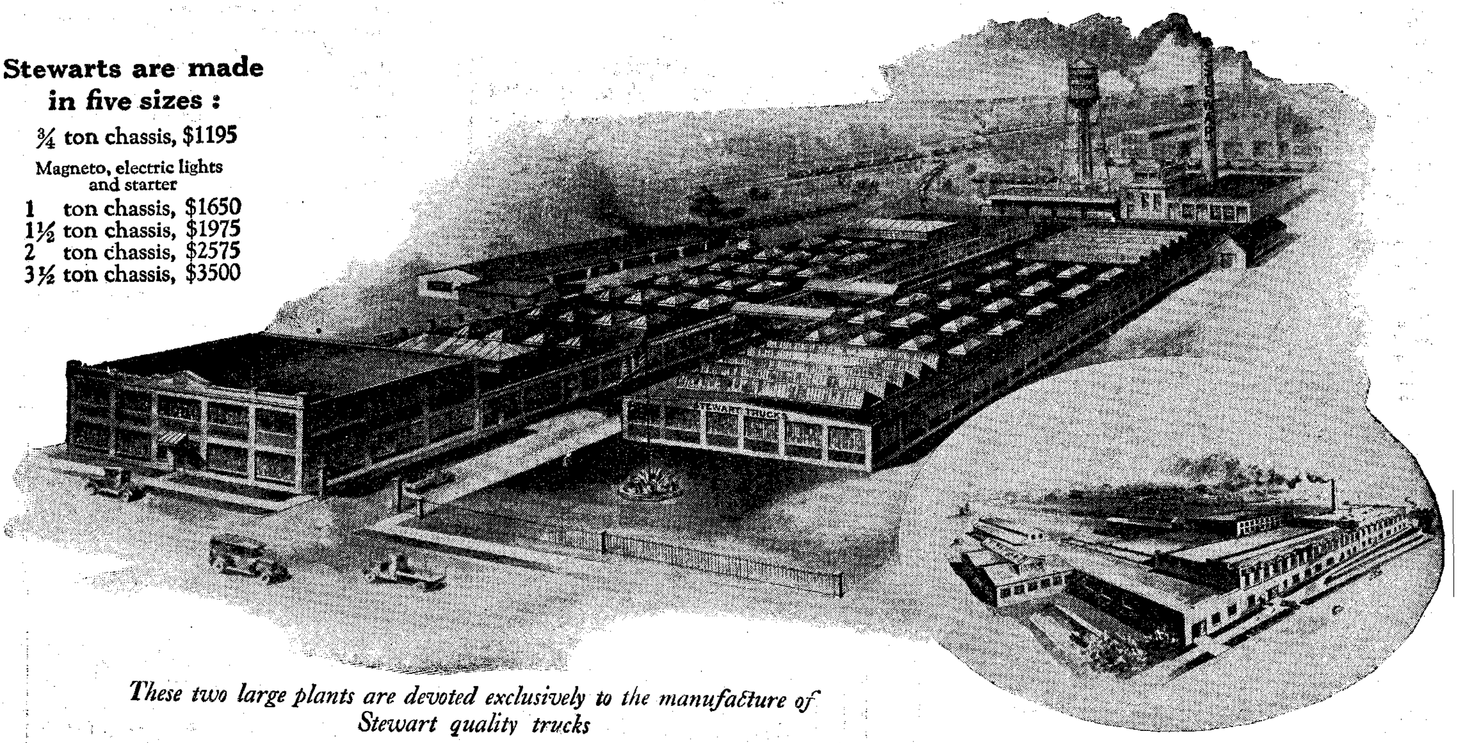
This astounding growth was inevitable. For Stewart design eliminates hundreds of really needless parts, not only saving $200 to $300 in first cost, but producing a stronger truck, simpler to operate and more economical as to gasoline, oil, tires and repairs.

Stewart owners are not merely pleased. They are enthusiastic. Hundreds of firms that began with one truck are now operating large fleets of Stewarts. The Stewart reputation for money-saving service has circled the globe. Thousands of Stewarts are paying daily profits in over 600 American cities, on hundreds of farms and in 27 foreign lands.

Stewart exhibits at all important motor shows give a real opportunity to convince yourself that the Stewart is America's greatest truck value.

Stewarts are made in five sizes:

¾ ton chassis, $1195
Magneto, electric lights and starter
1 ton chassis, $1650
1½ ton chassis, $1975
2 ton chassis, $2575
3½ ton chassis, $3500



These two large plants are devoted exclusively to the manufacture of Stewart quality trucks

STEWART MOTOR CORPORATION, BUFFALO, N. Y.

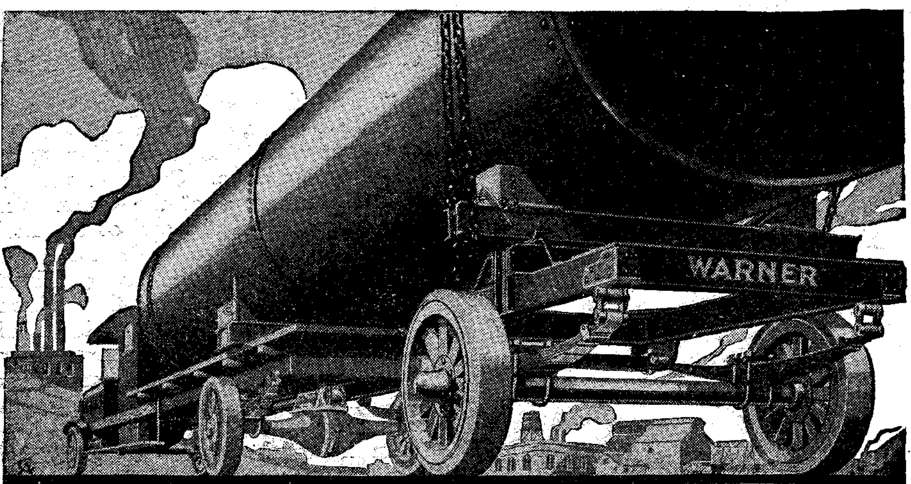
especially in recent years. We are told that—

"There has been a rapidly increasing number of those who speak and use the English language, who have adopted citizen's apparel, are in customary daily intercourse with their white neighbors, and are breaking away from tribal ties. An admixture of blood has occurred to such an extent that many Indians are hardly distinguishable from whites, and there has been in the government schools too many of this class who properly belong to State public schools, altho their number has of late been materially diminished. Again, the public school of the State is the place for the children of those Indians who have been released from guardianship. The combined capacity of government schools is not sufficient for all, and the real Indian should be given the preference as to educational opportunity."

ENROLMENT IN PUBLIC SCHOOLS—For the past three or four years the wisdom of encouraging attendance of Indian children in State public schools by payment of tuition for them has been strongly emphasized and Congress has made specific appropriations for such purpose. There has been a steady increase in the number of children accepted by the public schools and in the number of contracts made for the payment of tuition. There seems to have been "no prejudice against the Indian as such by the white members of the school district in most localities, and such feeling as has existed against this coeducation of the Indians with the whites is rapidly disappearing." In speaking of the value of the public schools as instruments of Americanism the Commissioner of Indian Affairs made significant allusion to their equal potency in the education of all races. He writes:

"It is my intention to push actively the policy of reserving the Indian schools for children who are not provided with adequate free-school facilities and to pay tuition for those who have access to public schools, but whose parents are wards of the Government. Underlying this purpose is the firm conviction that the great common-school system of our country, so wisely planned in Colonial times, is of vital value to our free institutions and should establish the elementary principles of our citizenship. The statistics essential to military conscription startlingly revealed the need of greater mass enlightenment and the special need of a uniform language. More potent than any other constructive force in our civilization is, or should be, the free public schools as a nursery of one American speech and of the simpler but fundamental lessons of civic virtue, social purity, and moral integrity. The hope of our democracy, now set up as a model for the world, lies in the successful teaching of these things to all classes and races of our polyglot population by a system of instruction such as the State public schools make possible. I hold, therefore, that the Indian child can have no better fortune than to enter these schools and become a learner of the knowledge and an absorber of the influences that tend to make us a unified people in all great purposes and ideals."

INDIAN AGRICULTURISTS—The agricultural advance of the Indians is evi-



Trailer Sales Increase 125% in New York State

Licenses issued in New York state show an increase of over 125% in trailers from 1917 to 1918. The increase will be greater this year. Truck owners are finding out what WARNER TRAILERS *really save.*

One driver can do the work of two men. Labor shortage necessitates it. Drivers don't object to picking up a WARNER TRAILER load. There is no excessive strain on the truck. WARNER TRAILERS track perfectly in the path of the truck. Drawbar yoke is hinged to the end of the drawbar and oscillates on the ball of a similar yoke connected to the tie-rod. The wheels are *always* parallel. There is no lost motion. Trailer tires always outwear truck tires.

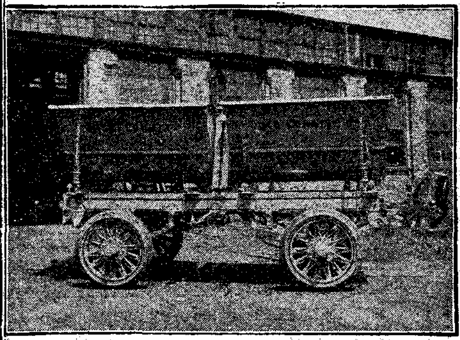
Frequently WARNER TRAILERS cut hauling costs in half. See what various firms are doing in different lines of business. Consider their experience as a guide to what you can save.

WARNER TRAILERS still further increase motor truck efficiency.

There is a size and type for every hauling purpose from the Two Wheel Warner used in the oil and lumber fields to the Semi-Trailer with Patented Warner Ball and Socket Fifth Wheel and the reliable Heavy Duty Four Wheel types.

WARNER TRAILERS will be exhibited at the National Automobile Shows—New York and Chicago. Distributors, dealers and those interested in increasing hauling efficiency will be heartily welcomed.

"Our Warner Trailers have been in operation for the past six months and have given satisfactory service." — Curtis Publishing Co., Philadelphia.



"Warner Trailers have given us splendid service and we are very much pleased with them."—Iron County Road Commission, Crystal Falls, Mich.

WARNER MFG. CO.
16 Main Street, Beloit, Wisconsin

WARNER
HEAVY DUTY
TRUCK TRAILERS
TWO AND FOUR WHEEL TYPES

For Every Woman

This fascinating collection of six dainty pink-packaged Toilet Requisites, all in a convenient rose-tinted box—fragrant, refined—will appeal at once to you if you've ever used

Hinds Honey and Almond Cream

In winter for rough, chapped skin, as in summer for sunburn, and at all times to cleanse, soften and freshen the skin, there's nothing better than Hinds Cream.

The above Hinds Week-end Box, 50c post paid in U. S.

*SAMPLES: Be sure to enclose the amount required, but do **not** send foreign stamps or money. Hinds Honey and Almond Cream 2c. Both Cold and Disappearing Cream 4c. Talcum 2c. Trial Cake Soap 8c. Face Powder, sample 2c; trial size 15c.*

Hinds Cream Toilet Necessities are selling throughout the world. Mailed, postpaid in U. S. A., from Laboratory, if not easily obtainable.

A. S. HINDS
241 West St.
Portland
Maine

USN
DECK PAINT
for porches, floors and walls
DRIES HARD OVERNIGHT

It is economy to keep floors, walls and porches *well painted*—that is, with a paint that dries hard and gives long service. U. S. N. Deck Paint withstands wear inside the home—and sun, rain, snow and sleet on the porch. If you don't know who sells it in your town, write us.

THE BILLINGS-CHAPIN CO.
Boston Cleveland New York

THE COLD WEATHER SOFT DRINK

A Bracing, Nourishing, Substantial, Appetizing, Satisfying Bread and Butter Beverage

Checona
Evans' NON-INTOXICATING Ale

Sometimes Called "Evans' Checona Beverage"

ORDER FROM NEAREST DEALER
Made on the Banks of the Hudson by
C. H. EVANS & SONS Estab. 1786 Hudson, N. Y.

denced at the fair held each year on most of the reservations, of which we read:

"The Indians exhibit their farm products, live stock, etc., in competition with one another, suitable prizes being awarded on the best exhibits. Certificates of merit, over the signature of the Commissioner and under the official seal of the Indian Office, are also given in deserving cases. These fairs are generally managed by the Indians themselves, through the medium of organized fair associations with Indian officers, under the supervision of the superintendent, which gives them practical experience in business organization and management.

An important feature of such fairs is "the baby show," where the Indian mothers bring their little ones "in best bib and tucker," cash prizes and certificates being given the winners.

"Indian exhibits were also shown at county and State fairs, in conformity with the practise inaugurated several years ago, on a larger scale than formerly, with continued good results, many prizes being awarded the Indians in open competition with other exhibitors. Their success along this line portends the final abolishment of the strictly Indian fairs on the reservations, and universal participation by the Indians in the State and county fairs on the same basis as the whites."

INDIAN EMPLOYMENT—From his war-experience the Indian has gained a wider vision of life, which has quickened his thought, opened his eyes to opportunity, and stimulated him to action, and many Indian soldiers have thus found work through the exercise of their energetic initiative. Thus we read:

"Indian youths have been working in this country on motors for army trucks, tractors, and airplanes, and in France as repair men on motor-driven vehicles, and a number from overseas have returned to the factories for electrical engineering and other kinds of mechanical activities. Applications for automobile-factory work are coming in steadily, and all worthy Indians so disposed are given a chance to become skilled mechanics in this way.

"In that section of the Arkansas Valley between Rocky Ford, Col., and Garden City, Kan., Indian students from seven schools in the Southwest worked in the sugar-beet fields and factories, over 400 students being thus engaged from the middle of May until the last of December. In the evenings they enjoyed athletic activities, baseball, and band concerts, besides being supplied with magazines and other reading matter. Progress was impeded by the outbreak of Spanish influenza in the camps, three-fourths of the boys being in the hospital at different times with this malady.

"Many Indians found lucrative employment in the cotton-fields of Arizona, particularly the Papago, who do the best work with Egyptian cotton.

"Many Indian girls were employed in clerical work, and as cooks, teachers, and housekeepers in schools, and others as nurses in army hospitals in this country, besides three in France with the Red Cross.

"The extent and the variety of the work in which the Indians have been engaged, and the fact that many from remote districts who have never before shown such interest have asked for employment, presage economic stability and progress."

Indoors or out

DEANS
COUGH DROPS
MENTHOLATED
"THEY CURE THE TICKLE"

Get the Drop on that Cough

ROOT at the football game!—dance at the house party! Relieve hoarseness, and the first slight sign of a cough or cold with Dean's Mentholated Cough Drops. Get them anywhere.

Dean Medicine Company
Milwaukee, Wisconsin

DEANS
MENTHOLATED
COUGH DROPS

5A
MOTOR ROBES

INVENTORS Who desire to secure patent should write for our guide book "HOW TO GET YOUR PATENT." Send model or sketch and description and we will give opinion of its patentable nature.

RANDOLPH & CO., Dept. 171, Washington, D. C.

FOR MEN OF BRAINS
Cortez CIGARS
-MADE AT KEY WEST-

Waxed Carbon Paper

Will not smut, dry out or wrinkle; superior wearing and manifolding qualities; will not soil the hands or stationery; make clean, legible copies. Sold direct at factory prices; all colors in light, medium and standard weights. Send $1 for sample box of 50 sheets, legal size. State color and weight desired. Money back if not pleased. Address

THE RIBBON WORKS, Galveston, Texas

PATENTS. Write for Free Guide Book and EVIDENCE OF CONCEPTION BLANK. Send model or sketch of invention for our free opinion of its patentable nature.
Highest References. Prompt Attention. Reasonable Terms.

Victor J. Evans & Co., 759 Ninth, Washington, D.C.

Base and Floor one continuous piece.

Imperial Sanitary Floor

Put On Like Plaster—Wears Like Iron

It is a composition material, easily applied in plastic form over old or new wood, iron, concrete or other solid foundation—Laid 3-8 to 1-2 in. thick—Does not crack, peel or come loose from foundation.

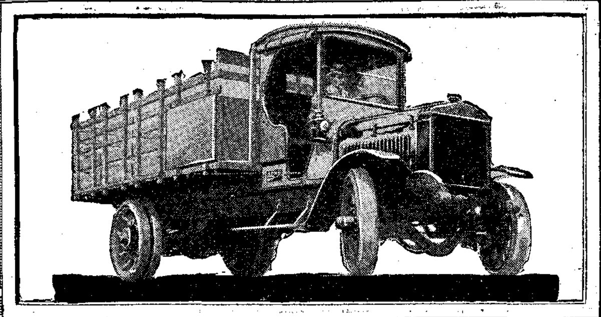
It presents a continuous, fine grained, smooth, non-slippery surface, practically a seamless tile—No crack, crevice or joint for the accumulation of grease, dirt or moisture—Is noiseless and does not fatigue.

The Best Floor

for Kitchen, Pantry, Bath Room, Laundry, Porch, Garage, Restaurant, Theater, Hotel, Factory, Office Building, Railroad Station, Hospital—all places where a beautiful, substantial and foot-easy floor is desired.

Your choice of several practical colors. Full information and sample FREE on request.

IMPERIAL FLOOR COMPANY
1110 Cutler Building, Rochester, New York
On the Market 10 years



ACME THE TRUCK OF PROVED UNITS

ACME

ACME THE TRUCK OF PROVED UNITS

The Seal of Dependable Performance

Trade Mark Registered, United States and Foreign Countries

A Call on Every Acme Owner in America

What a disinterested investigation of every Acme Truck in service has revealed. The most thorough cross-examination of motor trucks ever undertaken.

Suppose you could personally visit the truck owners of America and ask them man-to-man questions about their trucks. You would soon learn the absolute truth about truck service and performance.

We have done all this for you. We have had an independent organization go into every nook and corner of the United States to investigate motor trucks in service. These investigators asked owners the very questions you would ask. They sought the same information you would have sought.

These Vital Truck Facts Were Revealed

The Acme stands out conspicuously in the entire field for absolute satisfaction — dominating in easy-riding, easy-driving, power and operating economy. The average truck buyer has confidence in the proved units of construction. Acme truck owners are so satisfied that they will buy only Acmes when adding to their truck fleets. Acme owners boost Acme trucks to their friends. Thousands of prospects knew what Acme was doing for their friends and banked on the Acme doing the same for them.

Low Repair Records

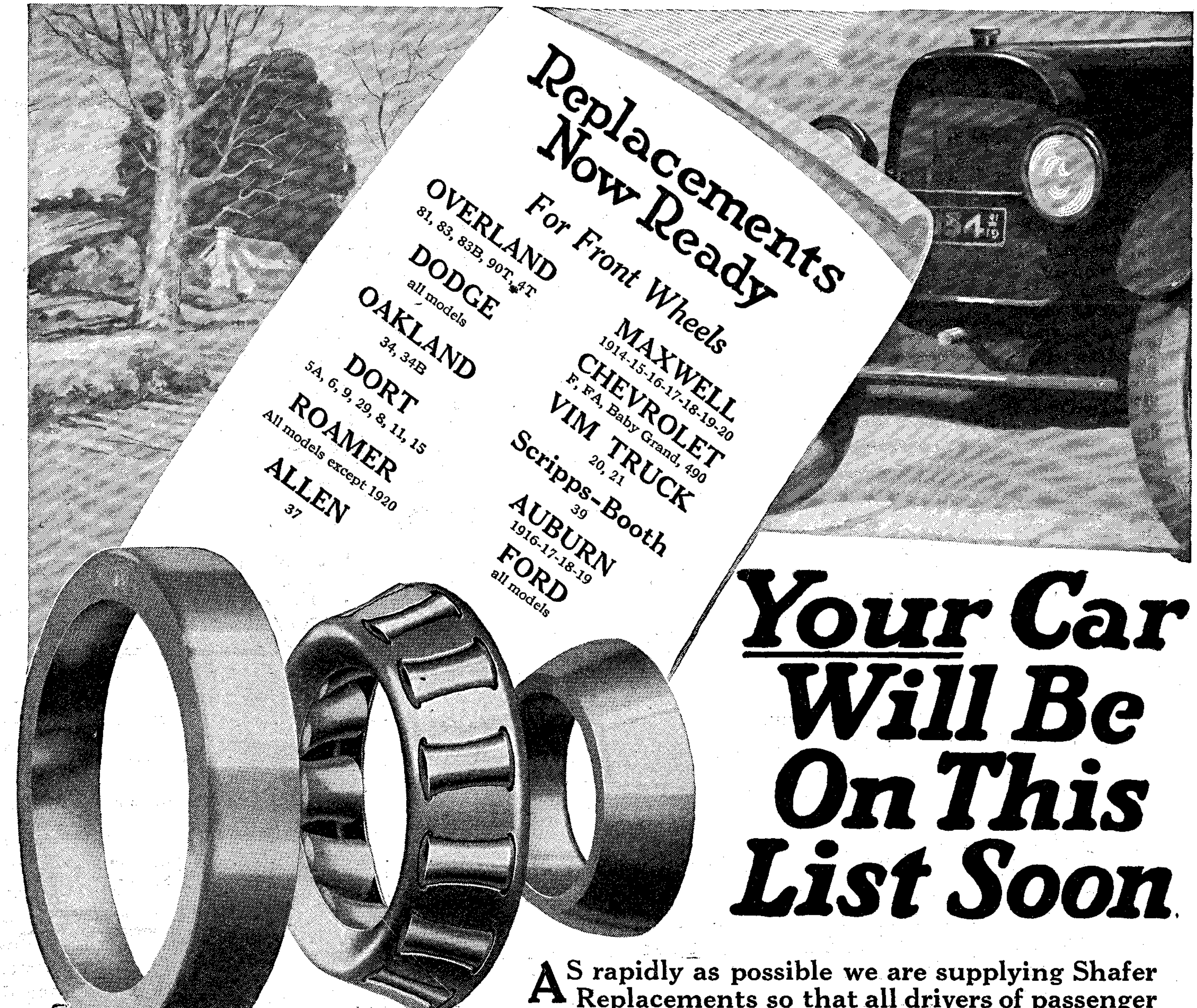
Prominent in the investigation stands the low repair cost of Acme trucks and the assurance of uninterrupted service over long periods. One 2-tonner Acme was operated every day for a year with a repair cost of only $1.85; another Acme has run 27,000 miles in three years with no serious repairs; another Acme has been in service three years continuously and never laid up a day; the owner of a 3½-ton Acme spent $1 in repairs in 2 years of service; another had 1 bearing replaced in 14 months of service; another Acme truck, averaging 25 miles a day for 26 months, a total of 19,500 miles, had the valves ground and the carbon burned out once in that time and no repairs.

Send for This Catalog

Send for "Pointers to Profits," our catalog. The facts it contains will save you money—save you from costly experiments. Address Department 269.

Acme Trucks Are Built in 1, 1½, 2, 3½ and 5-ton Models—
Bodies Built in Acme Factories

ACME MOTOR TRUCK COMPANY, *Cadillac, Mich.*



Replacements Now Ready
For Front Wheels

OVERLAND
81, 83, 83B, 90T, 4T
DODGE
all models
OAKLAND
34, 34B
DORT
5A, 6, 9, 29, 8, 11, 15
ROAMER
All models except 1920
ALLEN
37

MAXWELL
1914-15-16-17-18-19-20
CHEVROLET
F, FA, Baby Grand, 490
VIM TRUCK
20, 21
Scripps-Booth
39
AUBURN
1916-17-18-19
FORD
all models

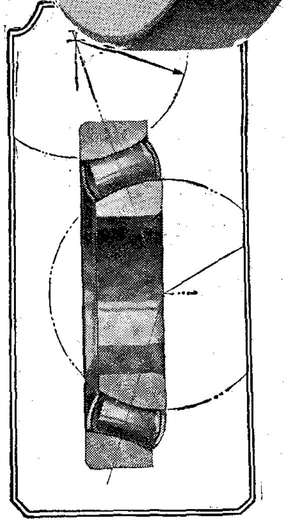
Your Car Will Be On This List Soon

AS rapidly as possible we are supplying Shafer Replacements so that all drivers of passenger cars, trucks, tractors, etc., may have a roller bearing with *100% load capacity FROM ANY ANGLE.*

One hundred per cent load capacity from any angle is only obtained in a bearing where the rollers are ***concave*** and set upon convex cups and cones at a 20 degree angle. The side-swipe of a stone, the thump where one wheel goes into a hole, the wrench of a rut or car track, the grinding pressure of a short turn—all force upon your car strains for which no ordinary roller bearing offers lasting resistance.

Shafer Roller Bearings are built for just such strains. The concave rollers placed at a 20 degree angle against convex outer race and inner cone take all shocks upon ***full length*** of contact surfaces, regardless from what direction they come.

Shafer Roller Bearings are also ***self-aligning.*** The inner cone with its sphere contour fits into a concave nest of rollers perfectly and adapts itself to every deflection (see sectional drawing). It can not be misaligned.



Sectional View
Note *concave* rollers resting upon *convex* cup and cone at 20 degree angle.

Send for Folder

Ask your car dealer, garage or repair man for Shafer Replacements. If he cannot supply you, write us.

Geo. D. Bailey Co. (*Shafer Replacement Division*) **4500 Ravenswood Avenue, Chicago, U. S. A.**

Self Aligning
SHAFER Roller Bearing
100% Load Capacity From Any Angle

INVESTMENTS AND FINANCE

WAR-LOANS REVEAL CANADA'S FINANCIAL STRENGTH

ANADA'S last war-loan was a notable triumph in finance, says the Ottawa orrespondent of *The Annalist*. Three hunred million dollars was asked for, $673,-00,000 was the amount subscribed, as nnounced on the day after the loan closed, nd final returns are thought to have added nough to bring the total to $700,000,000. 'his loan is taxable and was raised without he help of subscriptions from Canadian anks. Before the outbreak of the war Canada had never raised more than $5,000,-00 by borrowing it at home. During the ar this nation of eight million people has ubscribed to war-loans totaling $2,389,-21,550. The details are given as follows:

FIRST WAR-LOAN, 1915. RATE 5 PER CENT.

mount requested	$50,000,000
mount applied for	103,729,500
mount accepted	79,000,000

SECOND WAR-LOAN, 1916. RATE 5 PER CENT.

mount requested	$100,000,000
mount applied for	210,444,800
mount accepted	100,000,000

THIRD WAR-LOAN, MARCH, 1917. RATE 5 PER CENT.

mount requested	$150,000,000
mount applied for	260,768,000
mount accepted	150,000,000

URTH (FIRST VICTORY) LOAN, NOVEMBER, 1917. RATE 5½ PER CENT.

mount requested	$150,000,000
mount applied for	419,289,000
mount accepted	398,000,000

TH (SECOND VICTORY) LOAN, OCTOBER, 1918. RATE 5½ PER CENT.

mount requested	$300,000,000
mount applied for	695,390,250
mount accepted	660,000,000

SIXTH (THIRD VICTORY) LOAN

mount requested	$300,000,000
mount applied for (estimated)	700,000,000

The *Annalist* correspondent follows with few explanatory paragraphs:

"In 1915, when the first popular war-loan as announced, $50,000,000 was asked for, he rate being 5 per cent. Twice this mount was subscribed, but the banks aplied for 25 per cent. of the amount. Their ubscriptions, however, were not accepted. 'he first attempt was hardly a triumph, ut it was encouraging. The second loan 1916 showed growing confidence on the art of the Minister of Finance. He asked or $100,000,000. Over double this amount as subscribed, the banks applying for $56-00,000, but again none of their money was ccepted. In the spring of 1917 the third oan was announced, $150,000,000 being sked for. The applications totaled $260,-00,000, bank applications, which were not ccepted, amounting to $77,000,000.

"The most important fact about these oans was that they demonstrated that Caadians had the money and that they could e induced to buy their own national bonds. s yet there had been no appeal to the mass f the people to serve the nation by buying ar-bonds. But as the war continued the xpense grew and rendered it necessary that he people should be asked to place their avings and surplus wealth generally at the ervice of the state. It was then decided o adopt up-to-date war-loan campaign nethods in which the spectacular found a place. The First Victory Loan, launched n the fall of 1917, justified the new form of ppeal. To make assurance doubly sure, the rate of interest was increased to 5½ per cent. One hundred and fifty millions were asked for, $419,289,000 were applied for, and $398,000,000 accepted. The amount subscribed was gratifying, but possibly the best feature was the increase in the number of subscribers, which jumped from 40,000 in the March loan to 874,000 in November. It is also to be noted that the banks put in no applications.

Remove the Film
From Your Teeth—Then Look at Them

All Statements Approved by High Dental Authorities

Let Your Own Eyes Tell

This is to urge a free ten-day test of a tooth paste which combats the film. See the results and then decide if filmless teeth will pay.

That viscous film which you feel with your tongue is the cause of most tooth troubles. The tooth brush alone doesn't end it. The ordinary tooth paste does not dissolve it.

It clings to the teeth, gets into crevices and stays. That is why teeth brushed twice daily still discolor and decay.

That film is what discolors—not the teeth. It is the basis of tartar. It holds food substance which ferments and forms acid. It holds the acid in contact with the teeth to cause decay.

Millions of germs breed in it. They, with tartar, are the chief cause of pyorrhea. So, despite the tooth brush, all these troubles have been constantly increasing.

Dental science has found a way to combat that film. The way is now embodied in a dentifrice called Pepsodent. It does what nothing else has done. That is the tooth paste we ask you to try—use a ten-day tube at our cost and see the results for yourself.

You Do Not End the Film

Your present methods remove food debris, but they do not end the film. So teeth discolor and tartar forms. Wherever the film is, decay may follow.

The use of Pepsodent applies pepsin to the film. The film is albuminous and pepsin is the digestant of albumin. The object is to dissolve the film, then to constantly combat it.

Pepsin long seemed impossible. It must be activated, and the usual agent is an acid harmful to the teeth. But dental science has now discovered a harmless activating method. And that has made the constant use of active pepsin possible.

Clinical tests under able authorities have proved the results beyond question. Leading dentists all over America now urge the use of Pepsodent. It is keeping millions of teeth white, safe and clean.

Now we ask you to prove it.

Pepsodent REG. U.S. PAT. OFF.

The New-Day Dentifrice

A Scientific Product—Sold by Druggists Everywhere

Send this Coupon for a 10-Day Tube

Note how clean the teeth feel after using. Mark the absence of the viscous film. See how teeth whiten—how they glisten—as the fixed film disappears.

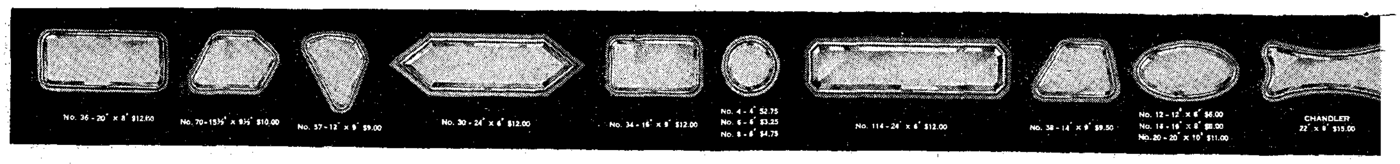
Do this and then decide between the old ways and the new. Cut out the coupon now.

Ten-Day Tube Free 261

THE PEPSODENT COMPANY,
Dept. 762, 1104 S. Wabash Ave., Chicago, Ill.
Mail 10-Day Tube of Pepsodent to

Name.....................................

Address.....................................


No. 36 - 20" x 8" $12.00
No. 70 - 15½" x 9½" $10.00
No. 57 - 12" x 9" $9.00
No. 30 - 24" x 6" $12.00
No. 34 - 16" x 9" $12.00
No. 4 - 4" $2.75
No. 6 - 6" $3.25
No. 8 - 8" $4.75
No. 114 - 24" x 6" $12.00
No. 38 - 14" x 9" $9.50
No. 12 - 12" x 6" $6.00
No. 16 - 16" x 8" $8.00
No. 20 - 20" x 10" $11.00
CHANDLER
22" x 8" $15.00

The Curtain Window that Made Smart Style Practical

The present immense popularity of the beveled plate glass window for motor cars is almost wholly due to the exclusive excellences of Johnston construction.

It is the Johnston Window that is suspended independently of the curtain so that the fabric cannot wrinkle, sag nor pull out; it is the Johnston that cannot rattle, warp, leak nor break.

It is the Johnston Window, also, that is cushioned in its metal and wooden mounting without putty, rubber or cement; it is the Johnston that is guaranteed for life.

For its structural perfection, for its flawless crystal beauty, it is the Johnston Window that has been chosen by 65 manufacturers of the finest American automobiles as standard equipment.

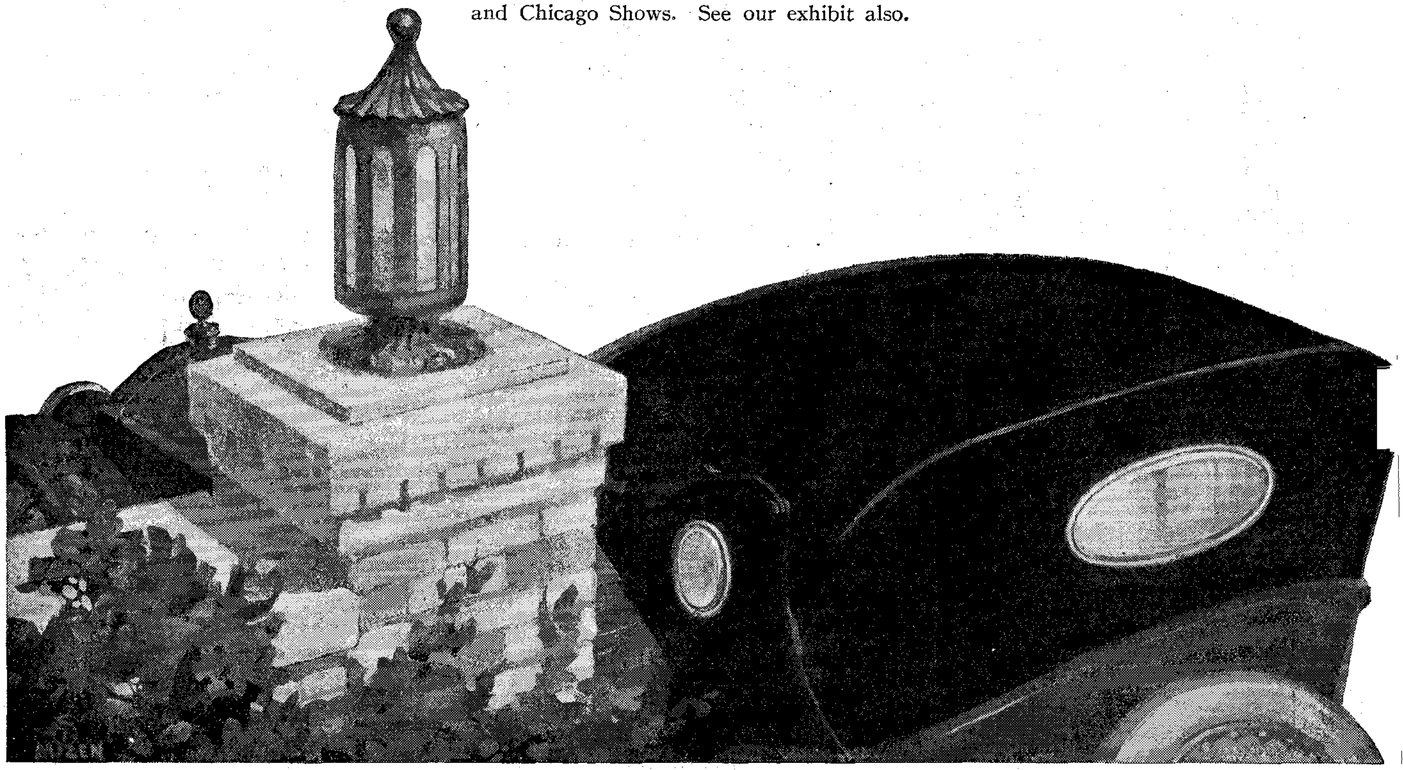
Naturally Johnston Windows cost a little more, but their superiority is evidenced by the fact that there are now more than one million three hundred thousand of them in use.

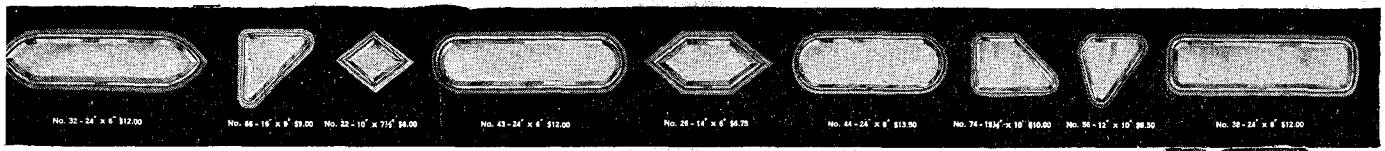
Conscientious trim shops install and guarantee them in all shapes and sizes. Make sure the ones *you* buy have the Johnston trade mark stamped clearly in the metal rim.

Send for our booklet, "On the Inside Looking Out." It tells the whole story.

WILLIAM R. JOHNSTON MANUFACTURING CO., Chicago, Illinois
HARTFORD WINDSHIELD CO., Pacific Coast Licensee and Distributor, Los Angeles, Cal.

You will admire Johnston Windows on most of the beautiful cars at the New York and Chicago Shows. See our exhibit also.




No. 32 - 24" x 6" $12.00
No. 66 - 16" x 9" $9.00
No. 22 - 10" x 7½" $6.00
No. 43 - 24" x 6" $12.00
No. 26 - 14" x 6" $6.75
No. 44 - 24" x 8" $13.50
No. 74 - 18¾" x 10" $10.00
No. 56 - 12" x 10" $8.50
No. 38 - 24" x 8" $12.00

JOHNSTON
CURTAIN
WINDOWS

JOHNSTON
TRADE MARK

Look for this trade mark

ESTABLISHED 1865

A SOUND INVESTMENT NETTING 7¼%

We have available and recommend a small amount of 7% Cumulative Preferred Stock of a nationally-known, old-established company. Total assets $318 per share. Net quick assets alone $128 per share. Present earnings nearly 3½ times preferred dividend requirements. No mortgage or funded indebtedness. Exempt from Normal Income Tax. Liberal sinking fund provision to retire part of issue each year.

Send for Circular No. 1051R.

Peabody, Houghteling & Co.
(ESTABLISHED 1865)
10 South La Salle St.
Chicago, Ill.

Branch Offices
Detroit, Cleveland, Milwaukee, St. Louis

ESTABLISHED 1865

In the fall of 1918 the Second Victory Loan was launched, $300,000,000 being asked, $685,390 subscribed, and $660,000,000 accepted. The number of subscribers reached 1,104,287.

"Unquestionably the campaign just closed has been the most successful of all; for not only has last year's mark undoubtedly been reached, but that in spite of the fact that the return on this year's issue is taxable.

"A number of Americans have the satisfaction of knowing that they had a part in this gratifying success. It is probable that $50,000,000 was subscribed, either by persons resident in the United States, or by American concerns doing business in Canada. A large part of the subscriptions made by the latter consisted of balances lying in this country. The knowledge that Americans were thus manifesting their faith in Canada no doubt did something to spur Canadians to greater efforts.

"No doubt those who have judged Canada's financial strength in the light of her prewar showing have been greatly surprized at the ease with which these large sums of money have been raised. The truth is that the old-settled portions of the Dominion are a great deal wealthier than strangers had imagined. The people of Ontario ,Quebec, and the Maritime Provinces are very industrious and thrifty, and it is probable that, with the exception of Ontario, which put up $354,000,000 in the campaign just closed, no province has subscribed up to anything like the measure of its possibilities. Certainly Quebec has not; and the same may be said of the Maritime Provinces.

"The war, with its heavy demands for many of the things that Canada produces, has made the Dominion very prosperous; but more than that it has imparted to Canadians a confidence in their country far exceeding anything that existed up to 1914. This confidence is shared by all classes of the community; for both the employer and the employee did well. The banks are not glutted with war-bonds. Indeed, the whole $2,100,000,000, which has gone into the various war-loans, has been, and is, forthcoming without their assistance, save in the form of such advances as they have made to such customers as needed cash to enable them to make their bond payments. Surely no better evidence of inherent financial strength could be desired than this, that a nation which hardly bought any of its own national securities before 1914 should, within less than five years, have taken them to the extent of $260 per capita."

NO BETTER TIME TO SAVE MONEY

With prices for all necessities sky-high and going higher, the average man is wondering how it is possible for any one to save at all. But an investor's magazine, *The Odd-Lot Review* (New York) tells us that such times as these are just the times for laying aside investing savings. Indeed, it believes that just now we ought to save perhaps twice as much as we did a few years ago. This is the way *The Review* reasons:

"In view of the decrease in purchasing power of the dollar from one hundred cents to fifty or thereabouts, people should really save twice as much as they used to, in order to keep their savings up to par. As a matter of fact, it would appear that by some curious kink in human nature they are saving half as much as they used to. In reality, they are saving only one-quarter as much, considering the depreciated value of the dollar.

"It is evident that saving on such a basis, while better than nothing, will not get the saver very far. It should be easier to save now when there is so much money afloat. Later on when deflation commences in earnest, it will be difficult to save, altho the necessity for so doing will be greater. It should be apparent that the time to save is now."

ADVICE TO PROSPECTIVE INVESTO IN FOREIGN CURRENCY

Punch's famous advice to those about get married is recalled by the answer given by Theodore H. Price in his *Commerce and Finance* (New York) to a reader asking how to invest in German and other foreign money and securities, and whether such transactions could be recommended as safe and sound for an investment. As Mr Price realizes that "a great many people in this country have bought or are considering the purchase of marks, francs, lire, or sterling as a speculation," he displays his warning against such investment prominently in his paper. He first explains the financial situation abroad—

"First of all, we may say that as far as we know none of the internal debts of any of the lately belligerent nations are specifically payable in gold. The internal bonds of Germany are payable in marks, those of France in francs, those of Italy in lire, and those of England in pounds sterling Before the war, when all the nations named were theoretically on a gold basis, there may have been a presumption that their debts when due would be paid in gold, but no such presumption is now tenable, for, as we pointed out in *Commerce and Finance*, the gold now held in all Europe is less than 2 per cent. of the outstanding currency and debt. This statement includes the large metallic reserves of the neutral Powers that are still on a gold basis.

"We are therefore of the opinion that it will be many years before the lately belligerent nations can pay off any portion of their debts or currency in gold.

"The British bonds recently sold in the United States were offered on terms which included what was practically a ten-years' option or 'call' on sterling exchange at $4.30 to the pound, and this would seem to indicate that those who are presumably best informed with regard to the financial future of England do not expect that the present discount on sterling will disappear in the immediate future.

"It is, however, reasonable to expect an earlier resumption of specie payments in Great Britain than in any of the other European nations recently at war. The trade of England embraces the world, and her currency has been less inflated than that of France, Italy, or Germany. Her recovery will, therefore, be quicker, and if we were speculating in foreign money, which we are not, we would rather buy sterling than marks, francs, or lire, even at the low prices at which the last three sorts of money are selling.

"This we say because it does not appear that Germany, France, or Italy has as yet been able to impose any limit upon the amount of paper currency issued, and it seems rather futile to hope that their obligations can advance in value while the printing process continues to turn them out.

"It is admitted that the Bank of France has increased its note-issue by seven billion francs since the armistice, and no one knows how many marks have been printed in Germany or how many lire have been issued in Italy in the same period.

"If we could be sure that the emission of paper money in Continental Europe would be stopt forthwith, then we might expect a gradual advance in its value as the production of the issuing countries increased, an they had a surplus that could be bought with their own currency, but failing any such restriction, those who are investing good American dollars in European paper are, we fear, trying to mop up the ocean with a broom."

Nothing Can Stop It.—Some weeks ag it was announced that the high cost of living had reached the peak. We suppose it took a balloon then.—*Greenville (S. C.) Piedmont.*

American Bankers Association

AMERICAN TRAVEL MAKES BETTER AMERICANS

TRAVEL throughout all parts of America by Americans of every part of America makes better Americans.

Travel results in a *better understanding* of Americans by Americans of all walks in life.

More Americans are traveling today than ever before, and that is a hopeful sign for America's future.

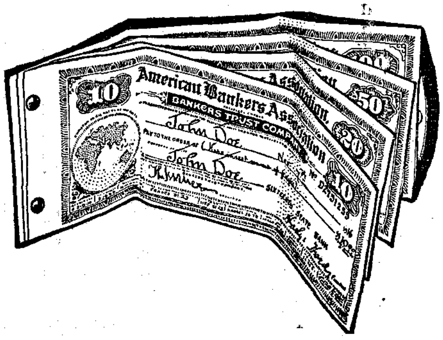
More Americans are traveling today on

"A·B·A" American Bankers Association Cheques

than ever before and that is a sign of intelligent appreciation of what are

the BEST funds for tourists

WHETHER you expect to travel in America or abroad, "A. B. A." Cheques will be the best funds for you—safe, convenient, comfort-promoting. You can obtain them in $10, $20, $50 and $100 denominations at most any important bank. Write for full information to Bankers Trust Company, New York.


American Bankers Association
Bankers Trust Company
John Doe
10
20
50

INVESTMENT SECURITIES

We specialize in Government bonds and other investment securities. This firm was founded in 1865 and we have always endeavored to recommend to our clients conservative investments. As members of the New York and Boston Stock Exchanges we are prepared to execute orders for the purchase or sale of securities on a cash basis in large or small amount.

A circular describing several issues of desirable investment securities will be sent on request.

Kidder, Peabody & Co.

115 Devonshire St.
Boston

17 Wall Street
New York

HW

Investment Securities

WE offer for investment various Government, Municipal, Railroad and industrial bonds and notes, yielding from 4¼% to 6¾%. These securities have been purchased for our own account after careful investigation and analysis. Many of these issues have attractive tax-exemption features.

We have prepared a circular describing these securities which we shall be glad to forward upon request.

You are invited to consult with us regarding the securities best suited to your requirements.

Commission Orders Executed

HORNBLOWER & WEEKS

Investment Securities

Founded in 1888

BOSTON
PORTLAND
PROVIDENCE

NEW YORK
CHICAGO
DETROIT

Members of the New York, Boston and Chicago Stock Exchanges

CURRENT EVENTS

PEACE PRELIMINARIES

December 10.—General Conada, form Roumanian Premier, signs the Austria and Bulgarian treaties for Rouman He also signs the treaty guarantee the rights of minorities.

December 11.—The German reply to th Supreme Council's note demanding th signing of the peace protocol is receiv in Paris.

December 12.—Premiers Lloyd George an Clemenceau, Foreign Minister Scialo of Italy, and other prominent Allie representatives meet in London t discuss, it is believed in diplomat quarters, the proposed Allied loan t Austria and the subject of the allianc between France and Great Britain t guarantee France against unwarrante attack.

December 13.—It is reported from Par that as a result of the conferences bein held in London by Premiers Lloy George, Clemenceau, and others, th American Government will be notific that in order to facilitate a compromi between adverse parties in the America Senate, the Allies are willing to accep some of the reservations to the Ve sailles Treaty proposed by the Foreig Relations Committee.

December 14.—A Berlin dispatch says th Germany in her note replying to th Allied demand that she sign the protoc expresses a willingness to make repara tion for the sinking of the Germa war-ships at Scapa Flow, in order t surmount "the final obstacle to the de inite conclusion of peace."

In a statement issued at the Whi House, it is made clear that the Pres dent will make no compromise, an does not intend to withdraw th Treaty and resubmit it, indicatin what reservations would be acceptabl to him, but intends to let the respons bility "rest on the Republican Senators.

AFFAIRS IN RUSSIA

December 10.—Representatives of E thonia, Lettonia, Lithuania, Polan the Ukraine, and White Russia, i conference at Dorpat, declare them selves in favor of a military and politica convention to defend their independenc says a message from Kovno.

The Bolsheviki begin a new offensive o the Narva front, says a dispatch fron Reval, Esthonia. All attacks are sai to have been repulsed with heav losses to the Bolsheviki.

Fresh Japanese troops are being sent int Siberia, say official dispatches fron Vladivostok received in Washington The recent reverses of Admiral Kol chak are said to have caused concern i Japan, and the Government is de termined to take steps in agreemen with the United States and the Allie to combat the Bolshevik menace.

December 12.—A Moscow official dispatc received in London announces the cap ture by the Bolsheviki, of Kharkov, i southern Russia, one of the bases o General Denikin. It is said the Den kin forces have fallen back to a de fensive line along the Poltava-Kie Railway.

December 13.—A deadlock of the Baltic conference at Dorpat is reported from that city, due to the Bolshevik demand that *Soviet* forces provisionally occupy Esthonia northward from Lake Peipus.

General Denikin captures 2,850 Bol sheviki and a number of cannon and machine guns in cavalry raids near

Kamyshin, according to a report to London.

The city of Poltava, about seventy-five miles southwest of Kharkof, is captured by the Bolsheviki, according to information received at Copenhagen.

December 15.—The Siberian Army continues to retreat before the Bolsheviki, says an official communication issued from Irkutsk. The Bolsheviki are said to have advanced about 217 miles from Omsk.

December 16.—The capture by the Bolsheviki of Novo Nikolavesk on the Trans-Siberian Railroad, 390 miles east of Omsk, is reported in Moscow. It is said that more than five thousand prisoners, many guns, and several generals of the Kolchak army were taken by the *Soviet* troops.

According to advices to the State Department at Washington the Bolsheviki at the Dorpat peace negotiations demand that Esthonia sever relations with the Allies and Finland, and turn over all transit and port facilities. These demands are said to be enforced by determined military attacks.

FOREIGN

December 10.—Deputy Sannes in a speech in the Dutch Chamber of Deputies refers to former Emperor William of Germany as "a danger to our country," and asks the Government seriously to consider his extradition.

The Trades Union Congress, in session in London, adopts a resolution calling upon the Government immediately to consider the peace overtures of the Russian *Soviet* Government and raise the blockade between Russia and the outside world.

The Norwegian Parliamentary Nobel Committee decides not to award the Nobel peace prizes for 1918 and 1919.

Two Jugo-Slav army corps are reported from Vienna to be moving toward Dalmatia and northern Albania. The Servian Government explains that this movement is a precautionary measure against any Italian attempt to occupy these sections.

Capt. Ross Smith, Australian aviator, arrives in Port Darwin, Australia, by airplane from England, thus winning a prize of 10,000 pounds sterling offered for the first aviator to make the flight.

Mexico replies to the American inquiry as to the killing of James Wallace by placing the blame upon Wallace himself, charging him with being drunk and failing to heed the command of a sentry to halt.

December 12.—The Scandinavian extreme Socialists and laborites, in conference at Stockholm, pass a resolution in support of a world-revolution and affirm solidarity with *Soviet* Russia's fighting workmen.

Manuel Allende Salazar forms a new Cabinet in Madrid to take the place of Ministry headed by Premier Toca, which resigned.

December 13.—Frank Hugo, an American citizen, manager of a ranch near Muzquiz, Coahuila, is being held for $10,000 ransom by the Villistas, says a report from Eagle Pass, Texas.

Great Britain decides to send a mission to Egypt, headed by Lord Milner, "to study the situation and confer with the native leaders," with a view to establishing in that country the largest measure of self-government of which Egypt is believed capable at this time.

December 14.—A report from Fiume says Gabriele d'Annunzio has decided to hand over the command of that city to regular troops under General Caviglia, former Minister of War.

The Italian Chamber of Deputies rejects,

THIS GREAT WIDE WORLD OF OURS

EVERYBODY is born with a certain longing to see the world. How many times do you hear people exclaim, "Some day I intend to *travel!*" The pleasure and educational benefits derived from seeing other scenes and other people endure throughout life.

Travel, however, must be orderly and systematically arranged. You always see more and learn more with greater pleasure when there is a reliable plan to guide you.

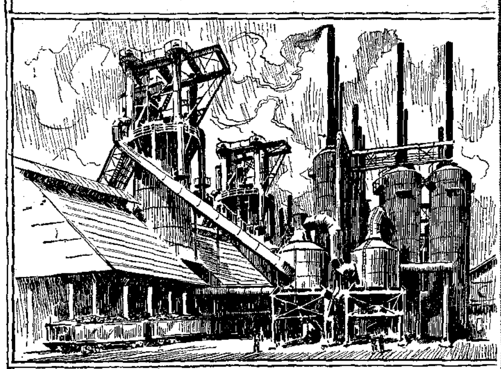
It has been our business for more than 78 years to point the right way to thousands of travelers. The competent forces maintained at each of our 150 offices, distributed throughout the world, provide an unequalled service of courtesy, efficiency, knowledge and travel experience.

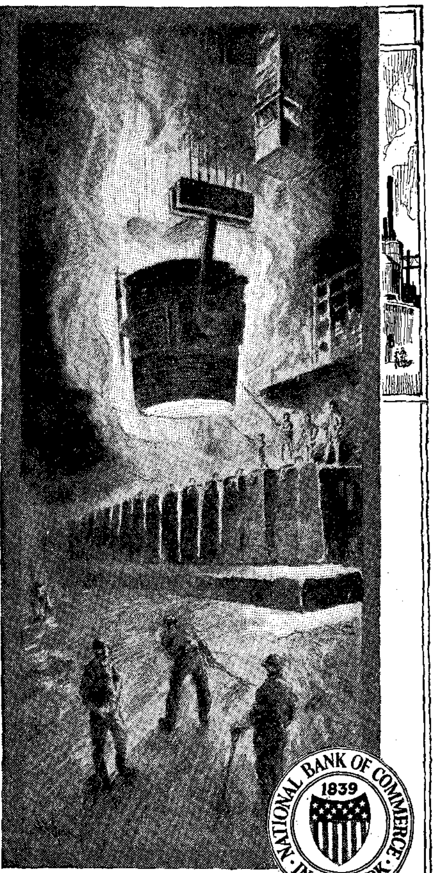
Every requisite for the Traveler. Steamship and Railway Tickets. Travelers' Cheques and foreign money, insurance and guide books. No charge for estimates. Correspondence invited.

Our Tropical Cruises, commencing in February, 1920, should prove of immediate interest. Write for booklet.

THOS. COOK & SON, New York

Boston Philadelphia Chicago San Francisco
Los Angeles Montreal Toronto





The Measure of Credit

BUSINESS development is measured by the confidence which men have in each other as expressed by credit.

Credit is the measure of business character and achievement.

The National Bank of Commerce in New York is a product of development of credit in America.

National Bank of Commerce in New York

Capital, Surplus and Undivided Profits Over Fifty Million Dollars

Consistent saving and investing in sound securities, begun early in life, will help make your later years your happiest years. While many men find their greatest pleasure in work, it is a comfort to be independent.

Make your later years independent

THE wise investor does not dread the passing of his productive years. He voyages into the future with tranquil confidence, free from financial worries.

If you have not formed the habit of investing regularly in interest-bearing securities, begin now to add substantial income from such investments to the income from your work, your houses, or your acres.

Our world-wide facilities enable us to pick and offer a wide range of high-grade bonds, notes and preferred stocks. We shall be glad to advise with you regarding your own special investment problems.

Our illustrated booklet, "Men and Bonds," tells all about our uncommon qualifications to serve you. A copy of it, and our latest list of carefully investigated offerings, will be sent you on request for D114.

THE NATIONAL CITY COMPANY
NATIONAL CITY BANK BUILDING
NEW YORK

The National City Company

National City Bank Building, New York

A National Investment Service: More than 50 correspondent offices connected by over 10,000 miles of private wires

BONDS - SHORT TERM NOTES - PREFERRED STOCKS

by a vote of 289 to 124, a proposal the Socialist members, providing for t immediate recognition of the Russia *Soviet* Government.

The local committee of the Egyptia Nationalist delegation, which visite Paris during the Peace Conferen issues a statement saying the "Egy tian nation" has decided to boyco the mission headed by Lord Milne on the ground that the Egyptia question is international and no domestic, and that the commissio wishes to conduct its discussion on th basis of a protectorate, which th Egyptians do not accept.

It is reported from Paris that amon the matters decided upon at the recen conference of premiers in London wa a French loan of 5,000,000,000 franc which, if placed in England, it is unde stood, will be accepted.

December 15.—According to advices re received at Eagle Pass, Texas, Fred C Hugo, recently captured and held fo ransom by Villistas, has been release No ransom money was paid.

Premier Lloyd George, speaking in th House of Commons, says the subject discust at his conference with Premie Clemenceau related to the conclusio of peace with Turkey and Hungary, th Adriatic question, and the Russia situation.

December 16.—A new Polish Cabinet i formed to succeed that of Ignace Ja Paderewski as Premier and Foreig Minister. The new Cabinet is heade by Mr. Skulski as Premier.

DOMESTIC

December 10.—The Republican Nationa Committee, in session at Washington selects Chicago as the meeting-plac of the National Republican Conventio on June 8, 1920.

The Republican National Committe adopts a recommendation to Republi can legislatures to ratify the Woman Suffrage Amendment.

The general committee of the United Mine-Workers of America, in session at Indianapolis, vote to end the coal strike by the acceptance of President Wilson's proposal for immediate return to work at a 14 per cent. wage-increase, pending final settlement of their controversy with operators by a commission to be appointed by the President.

A resolution is adopted by the House under which conscientious objectors are barred from obtaining homesteads on public lands to be opened to settlement within the next two years.

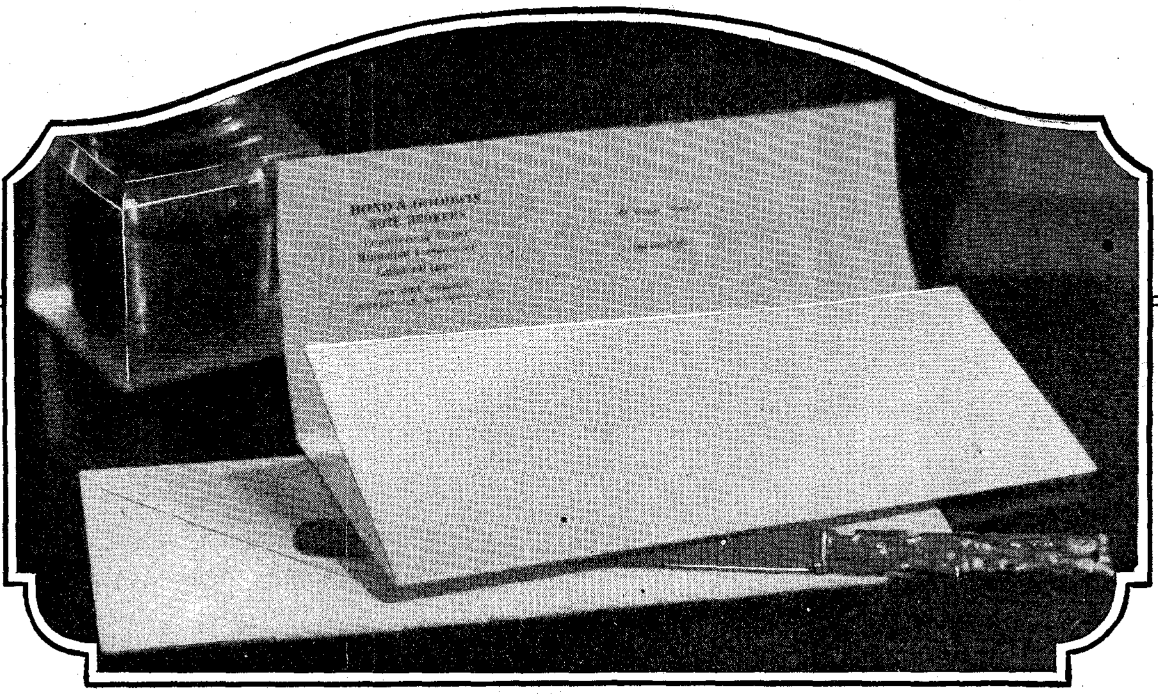
December 11.—Fuel Administrator Garfield resigns. He is said to disagree in principle with the coal-strike settlement arranged by the Government and the Mine-Workers' Union.

The North Dakota House of Representatives passes a Senate bill granting voters living more than half a mile from their respective voting-places the right to use an absent voter's ballot.

December 12.—The Senate passes the McNary Bill extending the life of the Sugar Equalization Board for another year from January 1, and providing for the purchase by the Government of the Cuban crop for 1920 to relieve the sugar famine.

Walter D. Hines, Director-General of Railroads, who became acting Fuel Administrator following the resignation of Dr. Harry A. Garfield, authorizes regional railroad directors to modify, where possible, the drastic restrictions on light, heat, and power to save coal. Director-General Hines also authorizes the restoration of train-service which had been curtailed to meet the coal shortage.

"The Committee of Forty-eight," repre-



Things that people like:

"The Crisp, Inviting Texture of Good Paper"

Among the inanimate things Rupert Brooke loved, he named "Firm sands . . . grainy wood . . . the crust of friendly bread . . ." And he might well have added "The crisp, inviting texture of good paper." There are few people who do not react favorably to a fresh, snappy bond paper—the sight of it—the feel of it.

Systems Bond is the paper with the bank-note feel. Tough as rag fibres and genuine loft-seasoning can make it, the sheet comes forth from its envelope alert and "crackly." Its knife-like creases spring open—its very quality implies it bears a message that is extra-personal. Yet Systems Bond is not a paper of extravagant cost, for the Eastern Manufacturing Company owns not only paper mills, but its own pulp mills and timberlands.

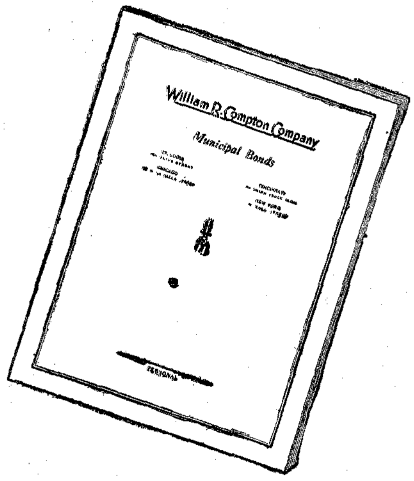
Systems Bond is available nationally. Consult your printer about it—give him an order for letterheads on it. Also, ask him to obtain for you a copy of our free book "The Modern Manufacture of Writing Paper", of value to every paper buyer.

Systems Bond is the standard bearer of a comprehensive group of papers—a grade for every Bond and Ledger need—all produced under the same advantageous conditions—and including the well known Pilgrim, Transcript, Atlantic and Manifest Marks.

EASTERN MANUFACTURING COMPANY
501 Fifth Avenue New York
Mills at Bangor and Lincoln, Maine

SYSTEMS BOND

"The Rag-content Loft-dried Paper at the Reasonable Price"



Simplify Your Income Tax Returns

Our Free Record Book will greatly simplify your problem of preparing Income Tax Returns.

Containing as it does, a summary and digest of the Income Tax Law and the exemption features of the various Liberty Loan issues, this booklet will give you a clear understanding of the provisions of the law as it affects you.

Space is provided for entering your income from various sources month by month as it comes in and also for indicating allowable deductions.

Thus, by familiarizing you with the requirements of the law and enabling you to record your income systematically, our Free Record Book materially lessens the work of making out returns.

Whether or not you are a client of ours, we will gladly mail you a complimentary copy of the Record Book upon request. Address Dept. L-12.

William R. Compton Co.
GOVERNMENT AND MUNICIPAL BONDS
"Over a Quarter Century in this Business"
New York Chicago
St. Louis Cincinnati New Orleans

6% NET
For 40 years we have been paying our customers the highest returns consistent with conservative methods. First mortgage loans of $200 and up which we can recommend after the most thorough personal investigation. Please ask for Loan List No. 77. Certificates of $25 and up also for saving investors.
PERKINS & CO. Lawrence, Kans

7% FIRST MORTGAGE LOANS On High-Class City Property
Semi-Annual Interest

We are located in the heart of Central Texas where Eastern Life Insurance, Trust Companies, and Savings Banks are lending millions every year.

Texas' oil, iron ore, sulphur, and her great agricultural resources, make it one of the fastest growing states in America.

Our record of twenty-two years, without loss to any investor, speaks for itself.

We also sell loans on the installment plan, allowing 6% interest on deposits. Investigate our plan. Loans always on hand $100.00 to $10,000.00.

Write for descriptive literature and list of offerings.

R. O. CULP & COMPANY
Mortgage Loans and Investments
Temple, Texas

senting the Liberals of the country, in conference at St. Louis, announce that a new political party composed of Liberals will probably be organized before July 1 at a convention where it is proposed to nominate candidates for President and Vice-President.

The value of the farm-products of the United States for the current year was $14,920,740,000 and exceeded the value of last year's crops by almost a billion and a half, according to final estimates of the Department of Agriculture.

Colorado completes the ratification of the Woman's Suffrage Amendment when the House unanimously passes the Senate resolution providing for ratification.

December 13.—Former Fuel Administrator Garfield is called before the Senate Coal Committee as the first witness in an investigation of the settlement of the coal strike. Dr. Garfield said his objection to the commission which is to arrange a final settlement with the miners was that while it is to have power to fix prices and wages, the public is represented on the commission by only one man. He considered this a surrender of power by the Government.

Fuel-conservation restrictions are lifted throughout the East, and normal light and train service is resumed.

Senator Hiram W. Johnson, of California, formally announces his candidacy for the Republican nomination for President.

December 14.—A "reconstruction conference" of representatives of the American Federation of Labor meets in Washington. Efforts are being made at this conference to establish relations with farmers' organizations.

Continuation of the country-wide steel workers' strike is voted by the conference in Washington of the twenty-four presidents of unions connected with the steel industry.

Franklin d'Olier, national commander of the American Legion, and several State commanders, will confer with the officials of the Bureau of War-Risk Insurance to arrange a program to reduce delays in the handling of insurance and other claims of war-veterans.

December 15.—Constitutionality of the War-Time Prohibition Act is sustained by the United States Supreme Court in a unanimous decision. The opinion held in effect, however, that the war-invoked "dry" period still may be terminated by Presidential proclamation of demobilization.

December 16.—Senator Kenyon, of Iowa, introduces a resolution in the Senate calling for an investigation by the Foreign Relations Committee concerning the activities of Ludwig C. A. K. Martens, self-styled Ambassador to the United States from the Russian *Soviet* Government.

James W. Gerard, former Ambassador to Germany, announces his candidacy for the Democratic nomination for the Presidency.

The House amends and passes the McNary Sugar Control Bill. As amended, it authorizes the President to license the sugar industry and to requisition the supply.

A meeting of city officials, heads of civic organizations, and others, called by Governor Frank O. Lowden, is held in Chicago to discuss plans for fighting profiteers. Attorney-General Palmer is present and pledges the full power of the Department of Justice in the prosecution of hoarders and profiteers.

Senator Harding, of Ohio, formally announces his candidacy for the Republican Presidential nomination in 1920.

What is Poor's Investment Service?

BEFORE investing you want the facts, from a thoroughly competent and impartial source, about the men, history and possibilities surrounding the securities you are about to purchase. Poor's Investment Service furnishes and interprets these facts for you. The Service includes:

Weekly Investment Letters—A study of the investment situation and definite recommendations on the purchases and sales of securities.

Special Investment Letters—A medium for furnishing timely information and special recommendations without delay.

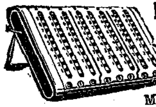
Monthly Investment Outlook—An interpretation of the latest data affecting corporations of public interest.

Advisory Department—A personal service on your own investment problems.

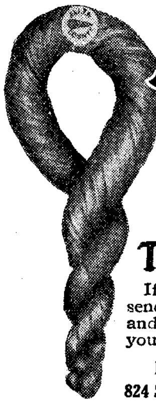
Send for full information about Poor's Investment Service. Ask for booklet A-3

Poor's Publishing Co.
Boston 33 Broadway Chicago
New York

Publishers of Poor's Manual of Railroads; Moody s Manual of Industrials; Moody s Manual of Public Utilities; Poor's Daily Digest Service; Poor's Classified Investment Holdings.



NEW AUTOMATIC ADDER, $3.50
Makes adding easy. It's accurate, quick, durable and easily operated. Capacity 8 columns. Saves time, brain work and errors. 65,000 pleased owners, Guaranteed 6 mo. Price $3.50 Delivered. WITH METAL BANDS, $5 Delivered. Agents wanted
J. H. BASSETT & CO., Dept. 130, 1458 Hollywood Ave., Chicago, Ill



Allen County Twist

Made of rich, ripe old air-cured Kentucky Natural Leaf. Unexcelled for chew or smoke.

Ten 10¢ Twists $1.00 Post Paid.

If your dealer hasn't it, send us his name, address and a dollar bill and we will send you ten 10c twists, post paid.

RYAN-HAMPTON TOBACCO CO.
824 South Floyd Louisville, Ky.

Please note changes in our requirements included in tabulation below:

Cash
Minimum orders—1 share: $100 bond.
Minimum commission—$1.50 per lot.

Partial Payment Plan
Minimum orders—5 shares, $500 bond.
Minimum commission—$1.50 per lot.
Minimum carrying charges—such advance over our bank loan rates as will yield, with the commissions, minimum of $2 per account per month.

Margin
Minimum orders—10 shares, $1,000 bond.
Minimum commission—$1.50 per lot.
Minimum carrying charges—same as on Partial Payment Plan.

John Muir & Co.
SPECIALISTS IN
Odd Lots
61 Broadway, N.Y.

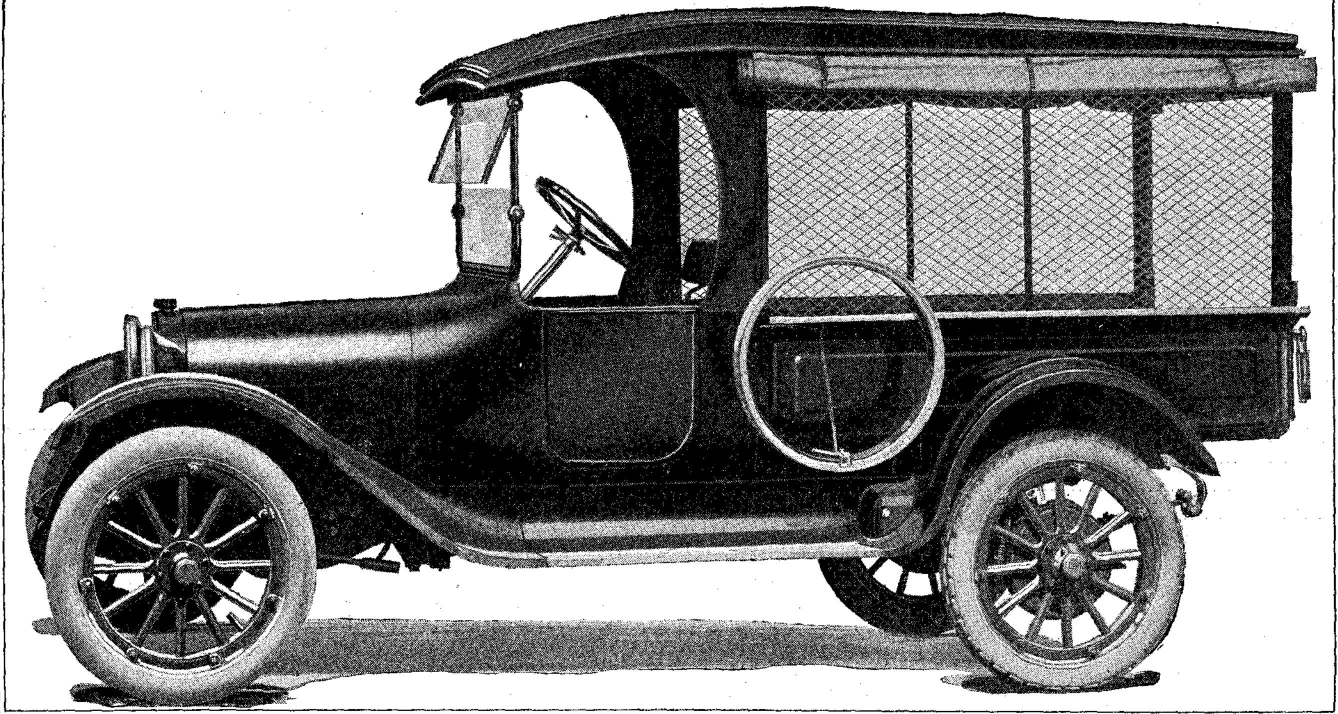
DODGE BROTHERS

BUSINESS CAR

Faithful, daily service; low
running cost; infrequent repairs

That is the experience of
thousands of users of Dodge
Brothers Business Car, in
every state in the Union

DODGE BROTHERS, DETROIT



To Prevent Infection

New-Skin is a genuine antiseptic.

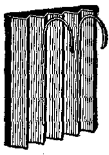
It has the power of destroying germs of infection.

This is demonstrated by scientific tests.

Use New-Skin promptly, as directed.

"Never Neglect a Break in the Skin"

NEWSKIN COMPANY, NEW YORK



SāVō AIR MOISTENER

Saves Health, Furniture, Pianos, Fuel, Paintings, Plants, Etc.

Also made for Hot Air Registers. Fill with Water, hang on back of any Radiator out of sight. The most efficient Humidifier made.

Write for free Booklet

SAVO MANUFACTURING CO.
Dept. L, 39 S. La Salle St., Chicago, Ill.

Violin Lovers

Please send us your name today so we can mail you copy of our latest Violin Catalog. Sent free to violinists. We have been the leading violin dealers in the United States for three decades, and our catalog, whether of new or old violins, is a possession to be prized by any intending purchaser. Also we will send particulars of our own **Cremonatone Violin** now first offered on a special small monthly payment plan. This is the best value in America in a moderately priced instrument. Also America's largest and finest collection of Fine Old Violins. Fill out and mail to us.

Name..
Address..
....

Please check whether interested in a new or old instrument. New Violin........Old Violin........

If a violin teacher, let us include your name in our teachers' list now being compiled.

We take used violins in exchange. **Write today.**

Up-to-date Music Dealers sell Lyon & Healy Instruments.

Lyon & Healy 57-94 E. Jackson Boulevard **Chicago**

WORLD'S LARGEST MUSIC HOUSE

THE SPICE OF LIFE

Very Particular.—An anarchist is a man who doesn't want any Government that he is not personally conducting.—*Washington Star.*

Real Culture. — YOUNG HOPEFUL — "What does college-bred mean, dad?"

DAD (reading heir's school expenses)—"Merely a big loaf, Percival."—*Panther.*

Mixed Identity.—"You didn't know who I was this morning!"

"No? Who were you?"—*Harvard Lampoon.*

Healthy.—"It is healthy to breathe through your nose, isn't it?" remarked the Old Fogy.

"Yes," replied the Grouch. "You can't talk when you are breathing through your nose."—*Cincinnati Enquirer.*

Nautical Information.—TENDERFOOT—"Why do they have knots on the ocean instead of miles?"

FIRST-CLASS SCOUT—"Well, you see they couldn't have the ocean tide if there were no knots."—*The Yale Record.*

Cure Declined.—"Got a hacking cough and a headache? Well, I've a little wood you could hack, and it might cure your headache."

"Much obliged, mum; but my 'eadache ain't of the splittin' variety."—*London Opinion.*

Unassuming.—"Is your wife one of those women who look at their husbands and say, 'I made a man of him'?" asked the impertinent friend.

"No," answered Mr. Meekton. "My Henrietta is very unassuming. She merely says she has done her best."—*Pittsburg Chronicle-Telegraph.*

Professional Jealousy.—It was one of those rare occasions when Sir E. Marshall Hall, the lawyer, lost a case, and he wasn't feeling so very happy over it.

"Your profession doesn't make angels out of men, does it?" said a medical friend, teasingly.

"No," retorted Sir Edward, "that's one thing we leave to you doctors!"—*London Blighty.*

All the Fixings.—"Has this car got a speedometer?" asked an old gentleman to the auctioneer, at one of the Disposal Board sales.

The auctioneer was equal to the occasion and replied:

"At thirty miles an hour it exhibits a white flag, at forty miles a red flag, and at fifty miles a gramophone begins to play, 'I'm going to be an angel, and with the angels dwell.'"—*London Tit-Bits.*

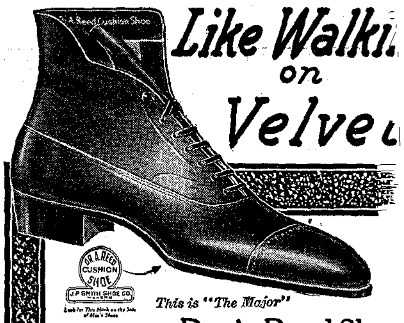
Foiled At Last.—"Algy fell in love with a girl at the glove counter. He bought gloves every day for a week. To discourage his attentions, she became a manicurist."

"Then he had his nails manicured every day, I suppose?"

"Just so. However, I don't think he will follow her any farther."

"Why not?"

"Then she got employment with a dentist."—*London Tit-Bits.*



Like Walki
on
Velve

This is "The Major"

Dr. A. Reed Shoe give extra comfort at n extra cost. These "easies shoes on earth" need n "breaking in."

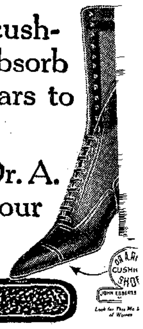
The Original and Genuine

Dr. A. Reea
CUSHION SHOES

J.P. SMITH SHOE CO.—JOHN EBBERTS SHOE
Makers of Men's Shoes ------- Makers of Women's Shoes
Chicago Buffalo

The famous cushion inner soles absorb all shocks and jars to the body.

If there is no Dr. A. Reed dealer in your city, write us.



One Socket Two Uses

For using light and appliance the BENJAMIN TWO-WAY PLUG gives single socket two outlets.

3 for $3.50 OR $1.25 EACH At Your Dealer's

BENJAMIN ELECTRIC MFG. CO.
Chicago
New York
San Francisco

Benjamin No. 92

Soothe Your Skin With Cuticura

All druggists; Soap 25, Ointment 25 & 50, Talcum 25. Sample each free of "**Cuticura, Dept. 6B, Boston.**"

Printing Cheap

Cards, circulars, labels, book, paper. Press $8 Larger $25 Job press $100. Save money. Print for others, big profit. All easy, rules sent Write factory for press catalog, TYPE, cards, etc. **THE PRESS CO., D-23, Meriden, Conn.**

HELP STOP BOLSHEVISM

The Christian Workers Magazine is read by those who believe that the church will be an important factor in helping solve the present social and labor unrest. It is an interdenominational monthly publication for educated men and women. It shows what world events mean—and brings to light the constant developments in Bible study. It is of interest to all. $1.50 a year.

FREE INFORMATION Send 25c today for 3 months trial subscription—and also receive free explanation of our Correspondence Bible Study Courses. No obligation.

The Moody Bible Institute
Department 769
153 Institute Place CHICAGO

THE CHRISTIAN WORKERS MAGAZINE